REGIONAL BIOLOGICAL ASSESSMENT AND REGIONAL BIOLOGICAL OPINION FOR SAND PLACEMENT AND SHORE PROTECTION IN FLORIDA

PROPOSED "TERMS AND CONDITIONS" (REQUIRED) AND "CONSERVATION RECOMMENDATIONS" (RECOMMENDATIONS) FROM U.S. FISH AND WILDLIFE SERVICE

- 1. Column A shows the applicable species.
- 2. Column B shows the item proposed by U.S. Fish and Wildlife Service.
- 3. Column C contains any comments we may have on the item in column B.
- 4. The last column contains possible solutions to include:
 - a. Remove the item.
 - b. Exclude the species or habitat from the Regional Biological Opinion.
 - c. Modify the item (specify).
 - d. Other (specify).

This table can be found on the Planning Division Server as follows: \\Saj-fs1ncc\pd\\GROUP\PDE\DUGGER\RBA\TandCworkshop\CommentResolution.doc

You may enter additional comments directly into column C. Or provide your comments directly to Kenneth Dugger, PD-EC.

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|-------------------|--|---|--|
| | APPLICABILITY OF THE REGIONAL BIOLOGICAL OPINION | The RBO should contain the following "escape clause": If the Corps is unable to comply with the Terms and Conditions, the Corps as project owner, construction agent, or regulatory authority may: 1) Inform the Service why the Term and Condition is not "reasonable" and/or "prudent" in this particular case and request exception under the RBO or 2) Initiate consultation with the service with reasonable and prudent terms and conditions for the specific project or activity. The Service may respond by either 1) allowing an exception to the terms and conditions under the Regional Biological Opinion or 2) recommending or accepting initiation of consultation (if initiated by the Corps) for the specific project or activity. [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| RBO in General | | | |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|----------------|---|--|----------------------|
| Sea Turtles | Reasonable and Prudent Measures CONDITIONS (REQUIRED) | RMP 3- Wording is confusing. Do they mean to restrict all of Gulf, Franklin, Manasota Key, Manatee, Sarasota and Charlotte from June 1 through Oct 31? {Gasch} RPM 5 - Turtle friendly profiles will differ according to region. Recommend that sea turtle friend profiles will implemented as much as practical, however, profiles must also be designed to provide the intended protection. RPM 6 & 7. These items increase funding pressures on strictly navigation projects if required. RPM 6 - Same as with the profiles, dunes will be designed to be as friendly as possible but still must provide the intended protection. RPM 9, 12 & 13. Anti-deficiency Act violation in non-funded years. RPM 12 - State that tilling is acceptable in lieu of compaction testing. RPM 16. Not within the Corps authority. RPM 25. Anti-deficiency Act violation in non-funded years. RPM 27. This may require Congressional authority/action. Who decides? RPM 16 - Should lighting surveys be the Corps' responsibility since we have no jurisdiction over lighting ordinance implementation and enforcement. [Godsey] | |
| Following Seri | ies Applies to Proposed work for all beaches | | |

| | Term and Condition or Conservation Recommendation | Comments | | |
|-------------|---|--|---|---|
| Species | | · · | Proposed Solution(s) | |
| Species | [Indicate Whether T&C (required) or CR (recommended)] 1. Beach compatible fill must be placed on the beach or in any associated dune system. Beach compatible fill is material that maintains the general character and functionality of the material occurring on the beach and in the adjacent dune and coastal system. Such material must be predominately of carbonate, quartz or similar material with a particle size distribution ranging between 0.062mm (4.0Φ) and 4.76mm (-2.25Φ) (classified as sand by either the Unified Soils or the Wentworth classification), must be similar in color and grain size distribution (sand grain frequency, mean and median grain size and sorting coefficient) to the material in the historic beach sediment at the disposal site and must not contain: 1a. Greater than 5 percent, by weight, silt, clay or colloids passing the #230 sieve (4.0φ); 1b. Greater than 5 percent, by weight, fine gravel retained on the #4 sieve (-2.25φ); 1c. Coarse gravel, cobbles or material retained on the 3/4 inch sieve in a percentage or size greater than found on the native beach; 1d. Construction debris, toxic material or other foreign matter; and 1e. Material that will result in cementation of the beach. If rocks or other non-specified materials appear on the surface of the filled beach in excess of 50 percent of background in any 10,000 square foot area, then surface rock should be removed from those areas. These areas must also be tested for subsurface rock percentage and remediated as required. If the natural beach exceeds any of the limiting parameters listed above, then the fill material must not exceed the | (indicate source of comment) Size and color requirement is that currently required by DEP in Water Quality Certifications. {Dugger} T&C 1 & 2. For navigation projects, the only available material is that removed from the channel. [Godsey] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
| | naturally | | | |
| Sea Turtles | occurring level for that parameter. 2. Pursuant to subsection 62B-41.005(15), Florida Administrative Code (F.A.C.), sandy sediment derived from the maintenance of coastal navigation channels must be deemed suitable for beach placement with up to 10 percent fine material passing the #230 sieve, provided that it meets the criteria contained in 1b to 1e above and water quality standards. If this material contains between 10 percent and 20 percent fine material passing the #230 sieve by weight, and it meets all other sediment and water quality standards, it must be considered suitable for placement in the nearshore portion of the beach. These standards must not be exceeded in any 10,000 square foot section extending through the depth of the nourished beach. If the native beach | Size and color requirement is that currently required by DEP in Water Quality Certifications. {Dugger} T&C 1 & 2. For navigation projects, the only available material is that removed from the channel. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: \\Saj- fs1ncc\pd\GROUP\PDE BA\TandCworkshop\Co tion.doc |
| Sea Turtles | exceeds any of the limiting parameters listed above, then the fill material must not exceed the naturally occurring level for that parameter. | | ,, | Deleted: L:\GROUP\PE RBA\TandCworkshop\Cution.doc |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|-------------|---|---|---|
| Sea Turtles | 3. Prior to any sand placement, all exposed concrete, metal debris and derelict coastal armoring must be removed from the beach to the maximum extent practicable. Debris removal activities must be conducted during daylight hours only according to the dates below and must not commence until completion of the sea turtle survey each day. Brevard, Indian River, St. Lucie, Martin, Palm Beach, and Broward (March 1 through November 30) Dade, Monroe (April 1 to November 30) Volusia, Flagler, St. John, Duval, Nassau (April 15 to November 30) Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Pasco, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier (May 1 to October 31) | Already required by USACE master spec – Section 35 20:3.4.2 (a) | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 4. The beach profile must be constructed with a berm ranging from 1:40 to 1:100, an upper slope ranging from 1:10 to 1:25 and a lower slope ranging from 1:30 to 1:50 except in areas with hard bottom structures offshore. The berm is measured from the horizontal distance from the slope break at the seaward foot of dune to the next seaward slope break. The upper slope is measures from the slope break at the end of the berm section to the Mean High Water Line (MHWL). The lower slope is measured from the MHWL seaward to where the elevation of the profile is approximately -5 feet MWL (Appendix x). | A diagram or profile of the required beach slope and dune feature would be helpful (this also is a new requirement). This simply may not be doable. The field offices, ConOps, and Engineering/Design need to look at this. [Dugger] Profiles must still be designed to provide the intended performance and protection. [Godsey] [FWS will use the FDEP report "Assessment of Alternative Construction Template for Beach Renourishment Project". However, it is unclear whether DEP has endorsed this report or any particular beach construction profile.] Is this constructable? Need Con-ops and Engineering input. {Gasch} | Remove T&C and/or CR Lexclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 5. If the sand placement project includes a dune in the profile design, the dune must have a slope of 1.5:1 followed by a gradual slope of 4:1 for approximately 20 feet seaward. | A diagram or profile of the required beach slope and dune feature would be helpful (this also is a new requirement). This simply may not be doable. The field offices, ConOps, and Engineering/Design need to look at this. [Dugger] Profiles must still be designed to provide the intended performance and protection. [Godsey] [FWS will use the FDEP report "Assessment of Alternative Construction Template for Beach Renourishment Project". However, it is unclear whether DEP has endorsed this report or any particular beach construction profile.] Is this constructable? Need Con-ops and Engineering input. {Gasch} | Remove T&C and/or CR LExclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| | 6. A cost benefit analysis and the process to modify the beach nourishment profile design to include a dune system must be explored. | For Civil Works Shore protection projects, a benefit:cost analysis is conducted in accordance with ER 1105-2-100 [should be addressed by Economics and/or Plan Formulation]. For regulatory permit actions see part 320.4(q) of Title 33 of the Code of Federal Regulations [should be addressed by RD]. For Navigation Dredging, the placement of sand on the beach would be based on either the least cost alternative or the non-Federal sponsor pays the difference. Any additional benefit:cost analysis for placement of material from Navigation dredging should not be required. [Dugger] For navigation projects, the funding for this action is not necessarily available. This does not adequately consider existing authorized projects. As written existing projects would have to be reevaluated and may lead to reauthorization needs. Recommendation: Before we agree to this the Corps needs to consider whether we have the authority to agree to conduct such reevaluations and the potential costs. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 7. A meeting between representatives of the contractor, the Service, the FWC, and the permitted sea turtle surveyor prior to the commencement of work on this project must be held. At least 10 business days advance notice must be provided prior to conducting this meeting. This will provide an opportunity for explanation and/or clarification of the sea turtle protection measures as well as additional guidelines when construction occurs during the nesting season such as storing equipment, minimizing driving, and follow up meetings during construction. | Two meetings are currently required by the Corps' specifications — the Preconstruction Conference (Section 0130 Section 1.5) and the Coordination meeting (Section 0145 Section 3.3). FWS, FWC, NMFS and other interested parties have been (and will continue to be) invited to these meetings. Contractor and contractor's subs are present at both meetings. The pre-con meeting is usually held 30- days in advance of the work beginning and the Coordination meeting is held about 7-10 days before work begins. We would need the e-mail and telephone number for FWS and | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | | FWC POCs [Dugger] | |

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| | Term and Condition or Conservation Recommendation | Comments | |
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| Species | [Indicate Whether T&C (required) or CR (recommended)] | (indicate source of comment) | Proposed Solution(s) |
| Sea Turtles | 8. Reports on all nesting activity shall be provided for the initial nesting season and for a minimum of two additional nesting seasons. Monitoring of nesting activity in the seasons following construction shall include daily surveys and any additional measures authorized by the Service and FWC. Ties Applies to nourishment or dredged channel material projects in Brevard, I | Should it be the responsibility of the Corps, the permittee, or non-federal sponsor to monitor sea turtle nesting for the initial nesting season and for a minimum of two additional nesting seasons following construction? (also a new requirement). This appears to fall more within the realm of research than "best available scientific information". Report of nesting activity for nesting seasons after construction is not now the responsibility of the Corps. For projects where there is a permittee or non-federal sponsor, this responsibility would be that of the permittee or non-federal sponsor (if required). For other activities (O&M funded maintenance dredging), this responsibility would lie with the Corps and have to be funded with the annual O&M budget (if required). [Dugger] Anti-deficiency Act violation in non-funded years. [Godsey] [FWS says it is a requirement with FDEP and its intent was to provide similar conditions for the co-sponsor/applicant to what the State requires. After FWS receives Corps' consolidated response, FWS will work through this issue with the FWS sea turtle regional coordinator.] GAME Database is already gathering this information and archiving it through FWC. http://research.myfwc.com/features/view_article.asp?id=27367 http://research.myfwc.com/features/view_article.asp?id=2309 | /Remove T&C and/or CR/Exclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| | Beach nourishment or dredged channel material placement must be started after | T&C 1 "(June 1 through October 31)" Nesting season for these | Remove T&C and/or |
| | October 31 and be completed before May 1. During the May 1 through October 31 period, no construction equipment or pipes may be placed and/or stored on the beach. | counties begins May 1. Also this T&C restricts construction within the higher density nesting areas, but does not describe these | CR Exclude Species and/or |
| | | locations. Recommendation: T&C should state May 1. Known higher | Habitat from RBO Modify T&C and/or CR |
| | | density nesting areas should be listed. [Godsey] | or Other (specify below) |
| Sea Turtles | | We need the ability to request additional construction time for lower density (eroded beaches and down-drift of inlets). [Dugger] | |

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| Sea Turtles | 2. If the beach nourishment project or dredged channel material placement will be conducted during the period from March 1 through April 30, early morning surveys for sea turtle nests must be conducted daily from March 1 through April 30 or until completion of the project (whichever is earliest). If the beach nourishment project or dredged channel material placement will be conducted during the period from November 1 through November 30, daily early morning sea turtle nesting surveys must be conducted 65 days prior to project initiation and continue through September 30. From March 1 through April 30 and November 1 through November 30 and eggs must be relocated per the following requirements: | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 2a. Nesting surveys and egg relocations will only be conducted by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to F.A.C 68E-1. Nesting surveys must be conducted daily between sunrise and 9 a.m. (this is for all time zones). The contractor must not initiate work until daily notice has been received from the sea turtle permit holder that the morning survey has been completed. Surveys must be performed in such a manner so as to ensure that construction activity does not occur in any location prior to completion of the necessarysea turtle protection measures. | Already required by USACE specs – 0157 Section 3.1.5.9(a) | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 2b. Only those nests that may be affected by sand placement activities will be relocated. Nests requiring relocation must be moved no later than 9 a.m. the morning following deposition to a nearby self-release beach site in a secure setting where artificial lighting will not interfere with hatchling orientation. Relocated nests must not be placed in organized groupings; relocated nests must be randomly staggered along the length and width of the beach in settings that are not expected to experience daily inundation by high tides or known to routinely experience severe erosion and egg loss, or subject to artificial lighting. Nest relocations in association with construction activities must cease when construction activities no longer threaten nests. | Already done in some USACE project (e.g. Kings Bay EC O&M – Specs – 0157 Section 3.1.5.4(b) – Consider adding to Master Specs. | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 2c. Nests deposited within areas where construction activities have ceased or will not occur for 65 days must be marked and left in situ unless other factors threaten the success of the nest. The turtle permit holder must install an onbeach marker at the nest site and/or a secondary marker at a point landward as possible to assure that future location of the nest will be possible should the onbeach marker be lost. A series of stakes and highly visible survey ribbon or string must be installed to establish a 10-foot radius around the nest. No activity will occur within this area nor will any activities occur which could result in impacts to the nest. Nest sites must be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the restoration activity. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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| | | Term and Condition or Conservation Recommendation | Comments | |
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| | Species | [Indicate Whether T&C (required) or CR (recommended)] | (indicate source of comment) | Proposed Solution(s) |
| | Species | 3. If the beach nourishment project or dredged channel material placement will be | Have previously done on some USACE projects (re 2004 | Remove T&C and/or |
| | | conducted in Indian River, St. Lucie, St. Martin, and/or Palm Beach Counties during | hurricane projects) – DeMarco has details. | CR |
| 1 | | the period from March 1 through April 30, daytime surveys for leatherback sea turtle | namouno projecto) Bernardo nad detaile. | Exclude Species and/or |
| | | nests must be conducted beginning March 1. Nighttime surveys for leatherback sea | | Habitat from RBO |
| | | turtles must begin when the first leatherback crawl is recorded within the project area | | Modify T&C and/or CR |
| | | and through April 30 or until completion of the project (whichever is earliest). Nesting | | or Other (specify below) |
| | | surveys must be conducted nightly from 9 p.m. until 6 a.m. The project area must be | | , , , , |
| | | surveyed at 1-hour intervals (since leatherbacks require at least 1.5 hours to complete | | |
| | | nesting, this will ensure all nesting leatherbacks are encountered) and eggs must be | | |
| ; | Sea Turtles | relocated per the preceding requirements. | | |
| | | 4. Immediately after completion of the beach nourishment project or dredged | Already do this - not in specs since we do not have contractor do | Remove T&C and/or |
| | | channel material placement and prior to March 1 for three (3) subsequent | – USACE or local sponsor. | CR |
| | | years, sand compaction must be monitored in the area of restoration in | | Exclude Species and/or |
| | | accordance with a protocol agreed to by the Service, FWC, and the applicant or | | Habitat from RBO |
| | | local sponsor. At a minimum, the protocol provided under 4a and 4b below | | Modify T&C and/or CR |
| | | must be followed. If tilling is needed, the area must be tilled to a depth of 36 | | or Other (specify below) |
| | | inches. Each pass of the tilling equipment must be overlapped to allow more | | |
| | | thorough and even tilling. All tilling activity must be completed prior to March 1. | | |
| | | A report on the results of the compaction monitoring must be submitted to the | | |
| | | Service's field office prior to any tilling actions being taken. (NOTE: The | | |
| | | requirement for compaction monitoring can be eliminated if the decision is | | |
| | | made to till regardless of post-construction compaction levels. Additionally, out- year compaction monitoring and remediation are not required if placed material | | |
| ١, | Sea Turtles | 1, , , , , , , , , , , , , , , , , , , | | |
| ı ⊢` | sea ruriles | no longer remains on the dry beach.) 4a. Compaction sampling stations must be located at 500-foot intervals along | Already do this | Remove T&C and/or |
| 1 | | the project area. One station must be at the seaward edge of the | Alleady do triis | CR |
| | | dune/bulkhead line (when material is placed in this area), and one station must | | Exclude Species and/or |
| | | be midway between the dune line and the high water line (normal wrack line). | | Habitat from RBO |
| | | At each station, the cone penetrometer must be pushed to a depth of 6, 12, and | | Modify T&C and/or CR |
| | | 18 inches three times (three replicates). Material may be removed from the | | or Other (specify below) |
| | | hole if necessary to ensure accurate readings of successive levels of sediment. | | or ourse (openity solon) |
| | | The penetrometer may need to be reset between pushes, especially if sediment | | |
| | | layering exists. Layers of highly compact material may lay over less compact | | |
| | | layers. Replicates must be located as close to each other as possible, without | | |
| | | interacting with the previous hole and/or disturbed sediments. The three | | |
| | | replicate compaction values for each depth must be averaged to produce final | | |
| | | values for each depth at each station. Reports must include all 18 values for | | |
| | Sea Turtles | each transect line, and the final 6 averaged compaction values. | | |

| Spe | ecies | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) Already do this | Proposed Solution(s) Remove T&C and/or |
|-----|-----------|---|---|---|
| | | 4b. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area must be tilled prior to | Alleady do triis | CR |
| | | March 1. If values exceeding 500 psi are distributed throughout the project | | Exclude Species and/or Habitat from RBO |
| | | area, but in no case do those values exist at two adjacent stations at the same depth, then consultation with the Service will be required to determine if tilling is | | Modify T&C and/or CR |
| | | required. If a few values exceeding 500 psi are present randomly within the | | or Other (specify below) |
| Sea | a Turtles | project area, tilling will not be required. | | , , , , , , , , , , , , , , , , , , , |
| | | 4c. Tilling must occur landward of the wrack line and avoid all vegetated areas | Already do this. | Remove T&C and/or |
| | | three square feet or greater with a 3 square foot buffer around the vegetated areas. | | Exclude Species and/or |
| | | arcas. | | Habitat from RBO |
| | | | | Modify T&C and/or CR |
| Sea | a Turtles | | | or Other (specify below) |
| | | 5. Visual surveys for escarpments along the project area must be made | Already do this. | Remove T&C and/or |
| | | immediately after completion of the beach nourishment project or dredged | What does "prior to March 1" mann? One month prior? ? months | CR |
| | | channel material placement and prior to March 1 for 3 subsequent years. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in | What does "prior to March 1" mean? One month prior? 2 months prior? | Exclude Species and/or Habitat from RBO |
| ' | | height for a distance of 100 feet must be leveled and the beach profile must be | <u> </u> | Modify T&C and/or CR |
| | | reconfigured to minimize scarp formation by March 1. If the project is | | or Other (specify below) |
| | | completed during the early part of the sea turtle nesting and hatching season | | |
| | | (March 1 through April 30), escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. | | |
| | | Surveys for escarpments must be conducted weekly. Results of the surveys | | |
| | | must be submitted within one month to the Service's appropriate Field Office | | |
| | | prior to any action being taken during the nesting season. The Service must be | | |
| | | contacted immediately if subsequent reformation of escarpments that interfere | | |
| | | with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet occurs during the nesting and hatching season to determine the | | |
| | | appropriate action to be taken. If it is determined that escarpment leveling is | | |
| | | required during the nesting or hatching season, the Service or FWC will provide | | |
| | | a brief written authorization that describes methods to be used to reduce the | | |
| | | likelihood of impacting existing nests. An annual summary of escarpment | | |
| | | surveys and actions taken must be submitted to the Service's Field Office (Table #). (NOTE: Out-year escarpment monitoring and remediation are not | | |
| Sea | a Turtles | required if placed material no longer remains on the dry beach). | | |

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| species | 6. From March 1 through April 30 and November 1 through November 30, staging areas for construction equipment must be located off the beach, if these areas are available. Nighttime storage of construction equipment not in use must be off the beach to minimize disturbance to sea turtle nesting and hatching activities. In addition, all construction pipes that are placed on the beach must be located as far landward as possible without compromising the integrity of the existing or reconstructed dune system. Temporary storage of pipes must be off the beach to the maximum extent possible. If the pipes must be on the beach it must be in such a manner to minimize the impact to nesting | | Remove T&C and/or CR Exclude Species and/o Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| 0 T | habitat and must not compromise the integrity of the dune systems. Pipes placed parallel to the dune must be five to ten feet away from the toe of the | | |
| Sea Turtles | dune. 7. From March 1 through April 30 and November 1 through November 30, direct lighting of the beach and nearshore waters must be limited to the immediate construction area and must comply with safety requirements. Lighting on offshore or onshore equipment must be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the waters surface and nesting beach while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of lighting plants must be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect sea turtles. Shields must be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside | Already done – USACE master specs – 3.1.5.10(a) | Remove T&C and/or CR Exclude Species and/o Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | the construction area (see Figure #). 8. Artificial beachfront lighting in the beach nourishment project or dredged | The means and methods for a shoreline lighting survey needs to | Remove T&C and/or |
| | material placement area must be managed by the applicant or local sponsor. A survey of all lighting visible from the nourished beach by May 15 following the nourishment work must be completed, using standard techniques for such a survey (attachment 1). | be specified (this shoreline lighting survey is a new requirement). This is a new requirement. How this survey is conducted must be specified along with any qualifications for persons conducting the lighting survey. [Dugger] | CR Exclude Species and/o Habitat from RBO Modify T&C and/or CF |
| | ourvey (attackment 1). | Shorefront lighting not under our jurisdiction for implementation or enforcement. [Godsey] [FWS provided the survey protocol.] | or Other (specify below) |
| | | Anything beyond conducting a lighting survey is not within the authority and jurisdiction of the Corps and must be deleted as a requirement. [Dugger] | |
| ea Turtles | | Additional surveys in the nesting season after Corps project is done is above and beyond what should be done by USACE. No mechanism to implement. | |

Deleted: Additional lighting surveys must be conducted by June 15, July 15, August 15, and September 15 of that nesting season.

Deleted: For each light source visible, the applicant or local sponsor must provide documentation that the property owner(s) has been notified of the problem light with recommendations for correcting the light. Recommendations must be in accordance with the county's or municipalities' specific lighting ordinance. For counties or municipalities with no lighting ordinance, recommendations must be in accordance with the Florida Model Lighting Ordinance for Marine Turtle Protection FAC 62B55. A summary report of each survey including documentation of property owner notification must be submitted to the Service (Table #) by the 1st of the following month; and a final summary report provided by December 15 of that year. After the final report is completed, a meeting must be set up with the local sponsor or applicant, county or municipality, FWC and the Service to discuss the sea turtle disorientations.

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| [Indicate Whether T&C (required) or CR (recommended)] 1. For higher density nesting beaches in Gulf and Franklin counties and on Manasota Key located in Manatee, Sarasota and Charlotte counties, nourishment will not be allowed during the main part of the nesting season (June 1 through October 31) [New Requirement]. For nourishment projects or dredged channel material placement in Nassau, Duval, St. Johns, Flagler, Volusia, Miami-Dade, Monroe, Collier, Lee, Charlotte, Sarasota, Manatee, Hillsborough, Pinellas, Pasco, Franklin, Gulf, Bay, Walton, Okaloosa, Santa Rosa, and Escambia counties, Florida, beach nourishment or dredged channel material placement activities may occur during the nesting season if not | (indicate source of comment) T&C 1 "(June 1 through October 31)" Nesting season for these counties begins May 1. Also this T&C restricts construction within the higher density nesting areas, but does not describe these locations. Recommendation: T&C should state May 1. Known higher density nesting areas should be listed. [Godsey] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
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| prohibited by local land use codes. | These "higher density nesting beaches" are not "high density nesting beaches". This additional restriction would exacerbate problems of scheduling use of the limited dredging fleet (especially during storm prone winter months) and would probably do very | | |
| 2. If any portion of the beach nourishment project or dredged channel material placement occurs in the following counties: For Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin and Pasco, nesting surveys must be initiated 70 days prior to nourishment or dredged channel material placement activities or by May 1 whichever is later. Nesting surveys must continue through the end of the project or through October 31 whichever is earlier. If nests are constructed in areas where they may be affected by construction activities, eggs must be relocated per the requirements listed below; For Dade, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier, and Monroe, nesting surveys must be initiated 65 days prior to nourishment or dredged channel material placement activities or by April 1 whichever is later. Nesting surveys must continue through the end of the project or through November 30 whichever is earlier. If nests are constructed in areas where they may be affected by construction activities, eggs must be relocated per the requirement listed below; For Volusia, Flagler, St. John, Duval and Nassau Counties, nesting surveys must be initiated 65 days prior to nourishment or dredged channel material placement activities or by April 15 whichever is later. Nesting surveys must continue through the end of the project or through November 30 whichever is earlier. If nests are constructed in areas where they may be affected by construction activities, eggs must be relocated per the requirements listed below: | little to benefit the species. [Dugger] Is "70 days" something new? Why not 65 days? [Dugger] Why inconsistency between April 1 and April 15 for the different counties? | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| 2a. Nesting surveys and egg relocations will only be conducted by persons with prior experience and training in these activities and who is duly authorized to conduct such activities through a valid permit issued by FWC, pursuant to FAC 68E-1. Nesting surveys must be conducted daily between sunrise and 9 a.m. (this is for all time zones). The contractor must not initiate work until daily notice has been received from the sea turtle permit holder that the morning survey has been completed. Surveys must be performed in such a manner so | Should list or have a link with valid permit holders. {Gasch} FWC should maintain a list on the web if valid relocators/permit holders – similar to the list of approved manatee observers available from the FWC website (see reference). | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | Deleted: \\Saj- fs1ncc\pd\\GROUP\PDE\DUG BA\\TandCworkshop\Commer tion.doc Deleted: L:\GROUP\PDE\DI RBA\\TandCworkshop\Comm |

| | Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| | | completion of the necessary sea turtle protection measures. | | |
| | | | | |
| , | | | Here dead in the cost and the Dec EO | Dansaya T0 O and/an |
| | | 2b. Only those nests that may be affected by construction activities will be relocated. Nests requiring relocation must be moved no later than 9 a.m. the morning following deposition to a nearby self-release beach site in a secure setting where artificial lighting will not interfere with hatchling orientation. | Have already done in the past- seeKings Bay EC spacs from summer 2007 | Remove T&C and/or CR Exclude Species and/or Habitat from RBO |
| | | Relocated nests must not be placed in organized groupings; relocated nests must be randomly staggered along the length and width of the beach in settings that are not expected to experience daily inundation by high tides or known to routinely experience severe erosion and egg loss, or subject to artificial lighting. | | Modify T&C and/or CR or Other (specify below) |
| | Sea Turtles | Nest relocations in association with construction activities must cease when construction activities no longer threaten nests. | | |
| | Sea Turtles | 2c. Nests deposited within areas where construction activities have ceased or will not occur for 65 days (70 days for Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, and Pasco) must be marked and left in situ unless other factors threaten the success of the nest. The turtle permit holder must install an on-beach marker at the nest site and/or a secondary marker at a point landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. A series of stakes and highly visible survey ribbon or string must be installed to establish a 10-foot radius around the nest. No activity will occur within this area nor will any activities occur which could result in impacts to the nest. Nest sites must be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the restoration activity. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | | 3. During the sea turtle nesting season, the contractor must not extend the beach fill more than 500 feet along the shoreline between dusk and the following day until the daily nesting survey has been completed and the beach cleared for fill advancement. If the 500 feet is not feasible for the project, an agreed upon distance will be decided on during the preconstruction meeting. Once the beach has been cleared and the necessary nest relocations have been completed, the contractor is allowed to proceed with the placement of fill during daylight hours until dusk at which time the 500-foot length limitation must | We will need input from field offices, ConOps, and Engineering/Design on this. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | Sea Turtles | apply. | | |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| | 4. Immediately after completion of the project and prior to the following dates: April 15 (Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Pasco, Volusia, Flagler, St. John, Duval, Nassau, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier) or April 1 (Dade, Monroe) for 3 subsequent years, sand compaction must be monitored in the area of restoration in accordance with a protocol agreed to by the Service, the State regulatory agency, and the applicant or local sponsor. At a minimum, the protocol provided under 4a and 4b below must be followed. If tilling is required, the area must be tilled to a depth of 36 inches. All tilling activity must be completed prior to those dates listed above. | If project is finished in Jan. or Feb. (and tilled afterwards) does beach need to be re-tilled before April deadline? {Gasch} | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | Each pass of the tilling equipment must be overlapped to allow more thorough and even tilling. If the project is completed during the nesting season, tilling will not be performed in areas where nests have been left in place or relocated. (NOTE: The requirement for compaction monitoring can be eliminated if the decision is made to till regardless of post-construction compaction levels. Additionally, out-year compaction monitoring and remediation are not required if placed material no longer remains on the dry beach.) A report on the results of the compaction monitoring must be submitted to the Service's field office prior to any tilling actions being taken (Table #). | | |
| Sea Turtles | 4a. Compaction sampling stations must be located at 500-foot intervals along the project area. One station must be at the seaward edge of the dune/bulkhead line (when material is placed in this area), and one station must be midway between the dune line and the high water line (normal wrack line). | To match the previous set of T&Cs – 4a and b should be combined into one | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 4b. At each station, the cone penetrometer must be pushed to a depth of 6, 12, and 18 inches three times (three replicates). Material may be removed from the hole if necessary to ensure accurate readings of successive levels of sediment. The penetrometer may need to be reset between pushes, especially if sediment layering exists. Layers of highly compact material may lie over less compact layers. Replicates must be located as close to each other as possible, without interacting with the previous hole and/or disturbed sediments. The three replicate compaction values for each depth must be averaged to produce final values for each depth at each station. Reports will include all 18 values for each transect line, and the final 6 averaged compaction values. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Sea Turtles | 4c. If the average value for any depth exceeds 500 pounds per square inch (psi) for any two or more adjacent stations, then that area must be tilled immediately prior to the following dates listed above. | To match the previous set of T&Cs – 4c and d should be combined into one | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 4d. If values exceeding 500 psi are distributed throughout the project area but in no case do those values exist at two adjacent stations at the same depth, then consultation with the Service will be required to determine if tilling is required. If a few values exceeding 500 psi are present randomly within the project area, tilling will not be required. | | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 4e. Tilling must occur landward of the wrack line and avoid all vegetated areas three (3) square feet or greater with a three (3) square foot buffer around the vegetated areas. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | 5. Visual surveys for escarpments along the project area must be made immediately after completion of the project and prior to the following dates: April 15 (Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Pasco, Volusia, Flagler, St. John, Duval, Nassau, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier) or April 1 (Dade, Monroe) for 3 subsequent years. Escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet must be leveled and the beach profile must be reconfigured to minimize scarp formation. | If project is finished in Jan. or Feb. (and visually surveyed) does beach need to be visually surveyed before April deadline? {Gasch} Already being done by USACE | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | If the project is completed during the sea turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. Surveys for escarpments must be conducted weekly. Results of the surveys must be submitted within one month to the Service's appropriate Field Office prior to any action being taken during the nesting season. The Service must be contacted immediately if subsequent reformation of escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet occurs during the nesting and hatching season to determine the appropriate action to be taken. If it is | | |
| Sea Turtles | determined that escarpment leveling is required during the nesting or hatching season, the Service will provide a brief written authorization that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken must be submitted | | |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] to the Service (Table #). (NOTE: Out-year escarpment monitoring and remediation are not required if placed material no longer remains on the beach). | Comments (indicate source of comment) | Proposed Solution(s) |
|-------------|--|---------------------------------------|--|
| Sea Turtles | 6. Staging areas for construction equipment must be located off the beach to the maximum extent practicable. During the following time periods: April 1 to November 30 (Dade, Monroe); April 15 to November 30 (Volusia, Flagler, St. John, Duval, Nassau); May 1 to October 31 (Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Pasco, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier). Nighttime storage of construction equipment not in use must be off the beach to minimize disturbance to sea turtle nesting and hatching activities. In addition, all construction pipes that are placed on the beach must be located as far landward as possible without compromising the integrity of the existing or reconstructed dune system. Temporary storage of pipes must be off the beach to the maximum extent possible. Temporary storage of pipes on the beach must be in such a manner so as to impact the least amount of nesting habitat and must not compromise the integrity of the dune systems. Pipes placed parallel to the dune must be five to ten feet away from the toe of the dune. | Already being Done | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| | | Term and Condition or Conservation Recommendation | Comments | |
|---|----------------------|---|--|---|
| , | Species | [Indicate Whether T&C (required) or CR (recommended)] | (indicate source of comment) | Proposed Solution(s) |
| | | 7. Direct lighting of the beach and nearshore waters must be limited to the immediate construction area and must comply with safety requirements. During | Already being done | Remove T&C and/or |
| | | the following time periods: April 1 to November 30 (Dade, Monroe); April 15 to | | Exclude Species and/or |
| | | November 30 (Volusia, Flagler, St. John, Duval, Nassau, Pinellas, Manatee, | | Habitat from RBO |
| | | Sarasota, Charlotte, Lee, Collier); May 1 to October 31 (Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Pasco). Lighting on offshore or onshore | | Modify T&C and/or CR or Other (specify below) |
| | | equipment must be minimized through reduction, shielding, lowering, and | | or Other (specify below) |
| | | appropriate placement to avoid excessive illumination of the waters surface and | | |
| | | nesting beach while meeting all Coast Guard, EM 385-1-1, and OSHA | | |
| | | requirements. Light intensity of lighting plants must be reduced to the minimum standard required by OSHA for General Construction areas, in order not to | | |
| | | misdirect sea turtles. Shields must be affixed to the light housing and be large | | |
| | Sea Turtles | enough to block light from all lamps from being transmitted outside the construction area (Figure #). | | |
| F | Sea ruriles | Artificial beachfront lighting in the beach nourishment project or dredged | The means and methods for a shoreline lighting survey needs to | Remove T&C and/or |
| | | material placement area must be managed by the applicant or local sponsor. | be specified (this shoreline lighting survey is a new requirement). | CR |
| | | The applicant or local sponsor must complete a survey of all lighting visible from the nourished beach by May 15 following the nourishment work, using | This is a new requirement. How this survey is conducted must be specified along with any qualifications for persons conducting the | Exclude Species and/or / Habitat from RBO |
| l | | standard techniques for such a survey (attachment 1). | lighting survey. [Dugger] | Modify T&C and/or CR |
| • | | , | | or Other (specify below) |
| | | | [FWS provided the survey protocol.] | [FWS provided the survey protocol.] |
| | | | T&C 8 Shorefront lighting not under our jurisdiction for | protocoi.j |
| | | | implementation or enforcement. [Godsey] | |
| | | | Anything beyond conducting a lighting survey is not within the | |
| | | | authority and jurisdiction of the Corps and must be deleted as a | |
| | | | requirement. [Dugger] | |
| | | | If the Corps is not doing work during the nesting season – we should not be paying for nest monitoring outside of the | |
| | Sea Turtles | | construction time frame. | |
| _ | Dune Planting | | | |
| | | Dune vegetation planting may occur during the sea turtle nesting season (May | | Remove T&C and/or |
| | | 1 through October 31) and planting must be by hand with the following conditions implemented. | | CR Exclude Species and/or |
| | | containe implemented. | | Habitat from RBO |
| | | | | Modify T&C and/or CR |
| | Sea Turtles | | | or Other (specify below) |
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Deleted: Additional lighting surveys must be conducted by June 15, July 15, August 15, and September 15 of that nesting season.

Deleted: For each light source visible, the applicant or local sponsor must provide documentation that the property owner(s) has been notified of the problem light with recommendations for correcting the light. Recommendations must be in accordance with the county's or municipalities' specific lighting ordinance. For counties or municipalities with no lighting ordinance, recommendations must be in accordance with the Florida Model Lighting Ordinance for Marine Turtle Protection FAC 62B55. A summary report of each survey including documentation of property owner notification must be submitted to the Service (Table #) by the 1st of the following month; and a final summary report provided by December 15 of that year. After the final report is completed, a meeting must be set up with the local sponsor or applicant, county or municipality, FWC and the Service to discuss the sea turtle disorientations.

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Sea Turtles | 9a. Daily early morning sea turtle nesting surveys must be conducted during the period from May 1 through October 31. If the planting is conducted in Brevard, Indian River, Martin, Palm Beach, St. Lucie and Broward Counties, daily early morning sea turtle nesting surveys are required and must include March 1 to April 30 and November 1 to November 30. Nest surveys must only be conducted by personnel with prior experience and training in nest surveys. Surveyors must have a valid FWC permit. Nest surveys must be conducted daily between sunrise and 9 a.m. (all times). No dune planting activity must occur until after the daily turtle survey and nest conservation and protection efforts have been completed. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | 9b. Nesting surveys must be initiated 65 days prior to dune planting activities or by May 1, whichever is later and by March 1, if the planting occurs in Brevard, Indian River, Martin, Palm Beach, St. Lucie or Broward Counties. Nesting surveys must continue through the end of the project or through September 1, whichever is earlier. Hatching and emerging success monitoring will involve checking nests beyond the completion date of the daily early | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles Sea Turtles | morning nesting surveys. 9c. Any nests deposited in the dune planting area not requiring relocation for conservation purposes must be left in situ. The turtle permit holder must install an on-beach marker at the nest site and a secondary marker at a point as far landward as possible to assure that future location of the nest will be possible should the on-beach marker be lost. A series of stakes and highly visible survey ribbon or string must be installed to establish an area of 3-foot radius surrounding the nest. No planting or other activity must occur within this area nor will any activities occur which could result in impacts to the nest. Nest sites must be inspected daily to assure nest markers remain in place and the nest has not been disturbed by the planting activity. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 9d. If a nest is disturbed or uncovered during planting activity, the permittee or their contractors must cease all work and immediately contact the responsible turtle permit holder. If a nest(s) cannot be safely avoided during planting, all activity within the affected project site must be delayed until hatching and emerging success monitoring of the nest is completed. | | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 9e. All dune planting activities must be conducted by hand and only during daylight hours. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Sea Turtles | 9f. All dune vegetation must consist of coastal dune species native to the local area; (i.e., native to coastal dunes in the respective county and grown from plant stock from that region of Florida). Seedlings must be at least 1 inch by 1 inch with a 2.5-inch pot. Planting must be on 18-inch centers throughout the created dune; however, 24-inch centers may be acceptable depending on the acreage of the area to be planted and the size of the plants. Vegetation must be planted with an appropriate amount of fertilizer and anti-desiccant material, as appropriate, for the plant size. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | 9g. No use of heavy equipment (trucks) must occur on the dunes or seaward for planting purposes. A lightweight (ATV type) vehicle, with tire pressures of 10 psi or less may be operated on the beach. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR |
| Sea Turtles Sea Turtles | 9h. All irrigation equipment must be authorized under a FDEP permit. | | or Other (specify below) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR |
| Sand Fencing | | | or Other (specify below) |
| Sea Turtles | Due to the limited benefits and the potential for impacts in high density marine turtle nesting beaches, sand fencing shall only be permitted in the following areas; Southeast Coast: Brevard County through Monroe County and the Southwest Coast: Manatee County through Collier County. | General comment: Although sand fencing is not done by the Corps. Locals often place sand fencing after constructions of the dunes are complete. The Corps has no way to regulate such activities on our CW projects. [Godsey] Sand fencing is generally not within the regulatory jurisdiction of the Corps and not normally part of a Corps shore protection project. "Sand Fencing" should be excluded from the RBO. [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 10. Any sand fencing or other dune restoration material placed in the project area must be installed outside of the sea turtle nesting season (May 1 through October 31) in accordance with the following conditions are implemented: | Sand fencing is generally not within the regulatory jurisdiction of the Corps and not normally part of a Corps shore protection project. "Sand Fencing" should be excluded from the RBO. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 10a. Sand fencing located seaward of the crest of the primary dune must be designed and installed with a maximum of ten (10) foot long spurs of sand fencing spaced at a minimum of seven (7) feet on a diagonal alignment (facing the predominate wind direction) for the shore parallel coverage of the subject property (Figure 1). | Sand fencing is generally not within the regulatory jurisdiction of the Corps and not normally part of a Corps shore protection project. "Sand Fencing" should be excluded from the RBO. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Sea Turtles | 10b. Once a sand fence becomes buried it must be removed and repositioned prior to the fence becoming 50% buried to maximize sand buildup. | Sand fencing is generally not within the regulatory jurisdiction of the Corps and not normally part of a Corps shore protection project. "Sand Fencing" should be excluded from the RBO. [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles Reporting | 10c. Upon site inspection by the Service, Florida Department of Environmental Protection, Bureau of Beaches and Coastal Systems, or the FWC, Bureau of Imperiled Species Management, if it is determined that the fence adversely impacts nesting or hatchling turtles, the fence must be removed or repositioned, as appropriate. | Sand fencing is generally not within the regulatory jurisdiction of the Corps and not normally part of a Corps shore protection project. "Sand Fencing" should be excluded from the RBO. [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 11. <u>Individual project reports</u> describing the actions taken to implement the terms and conditions of this incidental take statement must be submitted to the Service (Table #) by January 15 of the following year of completing the proposed work for each year when the activity has occurred. This report will include the dates of actual construction activities, names and qualifications of personnel involved in sea turtle nest surveys and relocation activities (separate the nests surveys for nourished and non-nourished areas), descriptions and locations of self-release beach sites, nest survey and relocation results and the information outlined in Table #. | How do these reports mesh with those already required of relocation permit and monitoring permit holders? Is this a duplication of reporting? [Jordan] Since the projects and information would be scattered across districts, regulatory, planning, and various biologist; a single consolidated report would be difficult. Also, is there a single POC in FWS to make sure such reports get to the right person? [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 12. In the event a sea turtle nest is excavated during construction activities, the permitted person responsible for egg relocation for the project must be notified so the eggs can be moved to a suitable relocation site. | Already do this. | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 13. Upon locating a sea turtle adult, hatchling, or egg harmed or destroyed as a direct or indirect result of the project, notification must be made to the FWC at 1-888-404-3922 and the Service (Table #). | Already do this (FWS/FWC notification occurs AFTER notification of the Corps team). | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | Care must be taken in handling injured turtles or eggs to ensure effective treatment or disposition, and in handling dead specimens to preserve biological materials in the best possible state for later analysis. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Groin or Jetty | Repair or Replacement | | |

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| Species | Term and Condition or Conservation Recommendatio [Indicate Whether T&C (required) or CR (recommended) | | Proposed Solution(s) |
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| | Reasonable and Prudent Measures | General comment: Nowhere in the BA does it discuss jetty repair. These requirements are very restrictive. Recommendation: Jetty repair needs to be discussed in the BA before a determination is made on these conditions. RMP 24 "repair to groin or jetties will only take place during daylight hours." This is very restrictive. If beach renourishment is allowed 24/7 it is not clear what the basis is for restricting jetty repair. Due to the high daily cost associated with equipment this may increase project costs. RMP 27 " Jetty system must be removed if it is determined to not be effective or to be causing a significant adverse impact to the beach and dune system affecting nesting or hatching sea turtles." Jetties are authorized features of navigation projects, which provide a more stable inlet for safe navigation. It is not clear as to who makes the determination if there is an impact. Recommendation: This RPM should be removed. If a feature of an authorized project is found to have adverse impacts then mitigation would need to be considered. [Godsey] | |
| Sea Turtles Sea Turtles | 14. If maintenance of a groin or jetty is required during the period from May to October 31, no work must be initiated without prior coordination with the Service's Field Office (Table #). If the groin or jetty repair construction must be conducted during the sea turtle nesting season, a barrier sufficient to prevent adult and hatchling sea turtles from accessing the project site must be in place around the perimeter of the project site (e.g., hay bales, silt screens). The barrier must be placed shore-parallel and shore perpendicular to the project site, at MHW, as close to the jetty as practicable, particularly during the period from sunset to sunrise; | General Comment: As stated under the RPM these conditions are very restrictive. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 15. If the groin or jetty repair construction will be conducted during the sea turtle nesting season, daily early morning surveys for sea turtle nests must be conducted. The barrier must be installed to prevent turtles from nesting in the project area (i.e., from 200 feet north of the north jetty to 200 feet south of the south jetty). However, if turtles do manage to access the project area, nests must be relocated per the following requirements: | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendatio [Indicate Whether T&C (required) or CR (recommended | Proposed Solution(s) |
|-------------|---|--|
| | 15a. Nesting surveys and egg relocations will only be conducted | Remove T&C and/or |
| | by personnel with prior experience and training in nesting survey | CR |
| | and egg relocation procedures. Surveyors must have a valid | Exclude Species and/or |
| | FWC permit. Nesting surveys must be conducted daily between | Habitat from RBO |
| | sunrise and 9 a.m. (for all time zones). The contractor must not | Modify T&C and/or CR |
| | initiate work until daily notice has been received from the sea | or Other (specify below) |
| | turtle permit holder that the morning survey has been completed. | |
| | Surveys must be performed in such a manner so as to ensure that | |
| Con Turbon | construction activity does not occur in any location prior to | |
| Sea Turtles | completion of the necessary sea turtle protection measures. | Danis |
| | 15b. Only those nests that may be affected by construction | Remove T&C and/or |
| | activities will be relocated. Nests requiring relocation must be moved no later than 9 a.m. the morning following deposition to a | Exclude Species and/or |
| | nearby self-release beach site in a secure setting where artificial | Habitat from RBO |
| | lighting will not interfere with hatchling orientation. Nest | Modify T&C and/or CR |
| | relocations in association with construction activities must cease | or Other (specify below) |
| | when construction activities no longer threaten nests. GPS | of Other (speelly below) |
| Sea Turtles | locations must be obtained for the relocated nests. | |
| oca rantico | 15c. Nests deposited within areas where construction activities | Remove T&C and/or |
| | have ceased or will not occur for 65 days must be marked and left | CR Tubble |
| | in situ unless other factors threaten the success of the nest. The | Exclude Species and/or |
| | turtle permit holder must install an on-beach marker at the nest | Habitat from RBO |
| | site and/or a secondary marker at a point landward as possible to | Modify T&C and/or CR |
| | assure that future location of the nest will be possible should the | or Other (specify below) |
| | on-beach marker be lost. A series of stakes and highly visible | |
| | survey ribbon or string must be installed to establish a 10-foot | |
| | radius around the nest. No activity must occur within this area nor | |
| | will any activity occur which could result in impacts to the nest. | |
| | Nest sites must be inspected daily to assure nest markers remain | |
| | in place and that the nest has not been disturbed by the | |
| Sea Turtles | restoration activity. | |
| | 15d.To the maximum extent practicable, all excavations and | Remove T&C and/or |
| | temporary alteration of beach topography must be filled or leveled | CR_ |
| | to the natural beach profile prior to 9 p.m. each day. During any | Exclude Species and/or |
| | periods when excavated trenches must remain on the beach at | Habitat from RBO |
| | night, nighttime sea turtle monitoring by the sea turtle permit | Modify T&C and/or CR |
| | holder must be conducted in the project area to further reduce | or Other (specify below) |
| | possible impacts to nesting and hatchling sea turtles. Nighttime | |
| | monitors will record data on false crawls, successful nesting, and | |
| Coo Turtloo | any additional activities of nesting or hatchling sea turtles in the | |
| Sea Turtles | project area; | |

| | Term and Condition or Conservation Recommendation | | | |
|-------------|---|--|---|---|
| Species | [Indicate Whether T&C (required) or CR (recommended |)] (indicate source of comment) | Proposed Solution(s) | |
| | 16. If the groin or jetty repair construction must be conducted | | Remove T&C and/or | |
| | during the sea turtle nesting season, beach access to the | | CR | |
| | construction site will be restricted to the delineated travel cooridor | | Exclude Species and/or_ | Deleted: mitated |
| | set up by the turtle monitor. Nests laid within the travel corridor | | Habitat from RBO | Deleted: wet sand below mean high |
| | will be marked and avoided with a 10-foot buffer. Staging areas | | Modify T&C and/or CR | water. Travel corridors on the beach |
| | for construction equipment must be located off the beach to the | | or Other (specify below) | to the mean high water will be |
| | maximum extent practicable. Nighttime storage of construction | | | delineated. |
| | equipment not in use must be off the beach to minimize | | | |
| O T " | disturbance to sea turtle nesting and hatching activities during this | | | |
| Sea Turtles | period | | | |
| | 17. If the groin or jetty repair construction must be conducted | Needs review by Con-Ops and Engineering | Remove T&C and/or CR | |
| | during the sea turtle nesting season, construction activities must | | | |
| | be conducted during daylight hours only to avoid encountering | | Exclude Species and/or Habitat from RBO | |
| | nesting females and emerging hatchling sea turtles during the | | Modify T&C and/or CR | |
| | following time periods: March 1 to November 30 (Brevard, Indian River, Martin, St. Lucie, Palm Beach); April 1 to November 30 | | or Other (specify below) | |
| | (Dade, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier, | | of Office (specify below) | |
| | Monroe); April 15 to November 30 (Volusia, Flagler, St. John, | | | |
| | Duval, Nassau); May 1 to October 31 (Escambia, Santa Rosa, | | | |
| | Okaloosa, Walton, Bay, Gulf, Franklin, Pasco). | | | |
| | Material stockpiled on the beach must only occur within the 400 | | | |
| | foot barrier. Construction activities must not occur in any location | | | |
| | prior to completion of the necessary sea turtle protection | | | |
| | measures outlined below. If any nesting turtles are sighted on the | | | |
| | beach during daylight hours, construction activities must cease | | | |
| | immediately until the turtle has returned to the water, and the sea | | | |
| | turtle permit holder responsible for nest monitoring has marked | | | |
| | the nest. All activities must avoid the marked nest area. | | | |
| Sea Turtles | | | | |
| | 18. Visual surveys for escarpments along the project area must | Generally, such repairs would involve very little sand placement. Earth | Remove T&C and/or | |
| | be made immediately after completion of any significant sand | moving would be limited to immediate vicinity of the groin or jetty. Significant | CR | - Deleted: the |
| | placement associated with groin and jetty repairs and 2 weeks | sand placement would be covered by other parts of the Regional Biological | Exclude Species and/or | |
| | prior to the following dates: April 1 (Dade, Monroe); April 15 | Opinion. | Habitat from RBO | |
| | (Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, | | Modify T&C and/or CR | |
| | Pasco, Volusia, Flagler, St. John, Duval, Nassau, Pinellas, | This requirement in not necessary. [Dugger] | or Other (specify below) | |
| | Manatee, Sarasota, Charlotte, Lee, Collier) for 3 subsequent | | | |
| | years. Escarpments that interfere with sea turtle nesting or that | | | |
| | exceed 18 inches in height for a distance of 100 feet must be | | | Deleted: \\Saj- |
| O | leveled and the beach profile must be reconfigured to minimize | | | fs1ncc\pd\GROUP\PDE\DUGGER\R BA\TandCworkshop\CommentResolu |
| Sea Turtles | scarp formation. | | | tion.doc |
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| | | | / | RBA\TandCworkshop\CommentResol |
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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended | | Proposed Solution(s) |
|-------------|---|--|--|
| Sea Turtles | If the groin or jetty repair construction is completed during the sea turtle nesting and hatching season, escarpments may be required to be leveled immediately, while protecting nests that have been relocated or left in place. Surveys for escarpments must be conducted weekly. Results of the surveys must be submitted monthly to the Service's appropriate Field Office (Table #) and prior to any action being taken during the nesting season. The Service must be contacted immediately if subsequent reformation of escarpments that interfere with sea turtle nesting or that exceed 18 inches in height for a distance of 100 feet occurs during the nesting and hatching season to determine the appropriate action to be taken. If it is determined that escarpment leveling is required during the nesting or hatching season, the Service will provide a brief written authorization that describes methods to be used to reduce the likelihood of impacting existing nests. An annual summary of escarpment surveys and actions taken must be submitted to the Service (Table #). (NOTE: Out-year escarpment monitoring and remediation are not required if placed material no longer remains on the beach). | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 19. No permanent exterior lighting will be installed in association with the project. No temporary lighting of the construction area is authorized at anytime during the sea turtle nesting season for the following time periods: March 1 to November 30 (Brevard, Indian River, Martin, St. Lucie, Palm Beach); April 1 to November 30 (Dade, Pinellas, Manatee, Sarasota, Charlotte, Lee, Collier, Monroe); April 15 to November 30 (Volusia, Flagler, St. John, Duval, Nassau); May 1 to October 31 (Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, Franklin, Pasco) Lighting will be allowed if safety lighting is required at any excavated trenches that must remain on the beach at night and must be authorized by the Service or FWC. Lighting must be limited to the immediate construction area only and must be the minimal lighting necessary to comply with safety requirements. Lighting on offshore equipment must be minimized through reduction, shielding, lowering, and appropriate placement of lights to avoid excessive illumination of the water, while meeting all U.S. Coast Guard and OSHA requirements. | This should be revised – the restriction says NO and then it says lighting can be used in compliance with Coast Guard or OSHA standards. | Remove T&C and/or CR Exclude Species and/or Habitat from RBO X Modify T&C and/or CR or Other (specify below) |

| | Term and Condition or Conservation Recommendation | | |
|-------------------------|---|--|--|
| Sea Turtles | [Indicate Whether T&C (required) or CR (recommended 20. In the event a groin structure fails or begins to disintegrate, all debris and structural material must be removed from the nesting beach area and deposited off-beach immediately. The groins must be removed if hatchlings are reported as being trapped in the corners of the T-heads portions. ALL T&Cs: The reasonable and prudent measures, with their implementing terms and conditions are designed to minimize the impact of incidental take that might otherwise result from the proposed action. The Service believes that no more than (number or extent) of nesting loggerhead, green, leatherback, Kemp's ridley, and Hawksbill sea turtles will be incidentally taken. If during the course of the action, this level is exceeded; such incidental take represents new information requiring initiation of consultation and review of the reasonable and prudent measures provided. The Corps must immediately provide an explanation of the causes of the taking and review with the service the need for possible modification of the reasonable and prudent measures. | Does this mean for the life of the groin? {Gasch} Removal of groins would be an expensive undertaking and require funding and authorization. There is little evidence that groins present a major problem to any significant number of hatchlings. The benefit of groins to the stability of the beach probably outweighs any such detrimental impacts to hatchlings. This requirement needs to be deleted. Removal of groins and breakwaters could have serious consequences to the stability of the shoreline which is probably why they were put there in the first place. [Dugger] The RBO should contain the following: If the Corps is unable to comply with the Terms and Conditions, the Corps as project owner, construction agent, or regulatory authority may: 1) Inform the Service why the Term and Condition is not "reasonable" and/or "prudent" in this particular case and request exception under the RBO or 2) Initiate consultation with the service with reasonable and prudent terms and conditions for the specific project or activity. The Service may respond by either 1) allowing an exception to the terms and conditions under the Regional Biological Opinion or 2) recommending or accepting initiation of consultation (if initiated by the Corps) for the specific project or activity. [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) Remove T&C and/or CRExclude Species and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles CONSERVATIO | N RECOMMENDATIONS | | |
| Sea Turtles | Section 7(a) (1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | 1. If public beach driving is allowed on the nourished beach, the local sponsor or applicant should have authorization from the Service for incidental take of sea turtles, their nests, and hatchlings due to such driving or provide written documentation from the Service that no such incidental take authorization is required. If required, the incidental take authorization for beach driving must be obtained prior to any subsequent sand placement events. | Same concern with shorefront lighting issues. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended) | Proposed Solution(s) |
|-------------|---|--|
| Sea Turtles | 2. For nourishment projects in Nassau, Duval, St. Johns, Flagler, Volusia, Miami-Dade, Monroe, Collier, Lee, Charlotte, Sarasota, Manatee, Hillsborough, Pinellas, Pasco, Franklin, Gulf, Bay, Walton, Okaloosa, Santa Rosa and Escambia Counties, Florida, construction activities for this project and similar future projects should be planned to take place outside the main part of the sea turtle nesting and hatching season. | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | Appropriate native salt-resistant dune vegetation should be established on the nourished dunes. | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 4. If a lighting ordinance has not been adopted by the local municipality within the project area, and lighting is shown to be an issue from the nourished beach an ordinance should be adopted prior to any subsequent sand placement events. | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | Beach nourishment should not occur on publicly owned conservation lands during the sea turtle nesting season. | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Sea Turtles | 6. To increase public awareness about sea turtles, informational signs should be placed at beach access points where appropriate. The signs should explain the importance of the beach to sea turtles and/or the life history of sea turtle species that nest in the area. | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Sea Turtles | In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations. | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|---------------|--|---|--|
| | Various requirements and recommendations (T&C and CR) | The habitat for beach mice needs to be better defined and delineated since it triggers a number of requirements and recommendations. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or |
| | | [Response from FWS: Escambia County (Perdido Key), Walton County (all beaches), Bay County (St. Andrew State Park, Shell Island, East Crooked Island, Mexico Beach & West Crooked Island), Gulf County (Palm Point, St Joe Beach and St Joseph peninsula), St Johns County (Anastasia State Park), Volusia County (New Smyrna beach)] | Other (specify below) |
| | | What constitutes "beach mouse habitat"? What are the "constituent elements" of viable beach mouse habitat? What are the geographic boundaries within which to look for "constituent elements" to identify beach mouse habitat? [Dugger] | |
| Beach Mice | | | |
| Beach | 1. Reasonable and Prudent Measure. The Corps, permittee, and/or local sponsor must implement beach mouse protection, monitoring, and habitat protection, maintenance, and restoration procedures to minimize impacts to beach mice from the construction and maintenance activities. The following are nourishment projects that have occurred in beach mouse occupied habitat: Escambia County beach nourishment, NAS Pensacola Pass channel maintenance, Walton County beach nourishment, St. Joseph Peninsula beach nourishment, New Smyrna beach nourishment, and Anastasia State Park beach | Anti-deficiency Act violation in non-funded years. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Mice | nourishment. | | |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] 1. (T&C) Beach mouse habitat must be avoided when selecting sites for equipment, pipes, vehicle storage and staging to the maximum extent practicable. | Comments (indicate source of comment) Define "habitat" as vegetated dune? Not the sandy beach? [Dugger] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBO _x_Modify T&C and/or CR or Other (specify below) | |
|---------------|--|--|---|---|
| Beach Mice | 2. (T&C) The exclusion area for equipment must be between 5 to 10 feet seaward of the existing dune toe or 10% of the beach width seaward of the dune toe in areas of occupied beach mouse habitat (see diagram below). The toe of the dune is where the slope breaks at the seaward foot of the dune. | This requirement may not be practicable in areas of severely eroded beach. [Godsey] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
| Beach Mice | 3. (T&C) Existing beach access points must be used for vehicle and equipment beach access to the maximum extent practicable. These accesses must be delineated by post and rope or other suitable material to ensure vehicles and equipment transport stay within the access corridor. The accesses must be fully restored to pre-project work configuration following project completion. Equipment and material staging/storage areas for the project must be located outside of vegetated dune habitat and public lands. No storage of equipment or materials must occur on the | "No storage of equipment or materials must occur on the beach or dunes any time of the year." No storage on the beach is very restrictive and it is not clear as to what is being considered storage. Dredging contractors typically stage some equipment on the beach, pipeline, dozers, etc. This language needs clarification. Recommendations: This needs to clarify whether this includes staging areas. [Godsey] Better define public lands. State-owned water bottoms, | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | - Formatted : Highlight |
| Beach Mice | beach or dunes at any time of year. Parking areas for construction crews must be located as close as possible to the work sites, but outside of vegetated dunes to minimize impacts to existing habitat and the need to transport workers along the beachfront. The number of beach access sites for vehicles and equipment must be minimal, clearly marked, and located in areas that are devoid of vegetation. All access and staging areas must be restored upon completion of emergency berm construction and repair; | parks? Note that many stretches of beach are along State, County, or municipal parks established for beach goers. If this is to include all public lands, it would be much too restrictive. [Dugger] | | Deleted: \\Saj- fs1ncc\pd\GROUP\PDE\DUGGER\R BA\TandCworkshop\CommentResolu |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) | |
|---------------|---|---|--|-----------------------------------|
| Beach Mice | 4. (T&C) The creation of new or expansion of existing beach accesses within beach mouse habitat, consisting of a vegetated dune, for vehicles and equipment is authorized no more than every 4 miles. The distribution of access areas will result in the least number of access areas within beach mouse habitat as practicable and delineated by post and rope or other suitable material to ensure vehicles and equipment transport stay within the access corridor. The access points must be as follows: i. No more than 25 feet wide for vehicles ii. No more than 50 feet wide for equipment. | | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
| Beach Mice | 5. (T&C) New or expanded beach accesses that impact vegetated dunes must be replanted within 3 months following project completion. The habitat restoration must consist of restoring the dune topography and planting with appropriate native dune vegetation (i.e., native to coastal dunes in the respective county and grown from plant stock from that region of Florida). Seedlings must be at least 1 inch by 1 inch with a 2.5-inch pot. Planting must be on 18-inch centers throughout the created dune; however, 24-inch centers may be acceptable depending on the area to be planted. Vegetation must be planted with an appropriate amount of fertilizer and anti-desiccant material, as appropriate, for the plant size. No sand stabilizer material (coconut matting or other material) must be used in the dune restoration. The plants may be watered without installing an irrigation system. The restoration must be considered successful if 80 percent of the total planted vegetation is documented to survive six months following planting of vegetation. If the habitat restoration is unsuccessful, the area must be replanted following coordination with the Service. | It is not possible to "restore" habitat within 3 months. Habitat could be "replanted" within 3 months. [Dugger] | Remove T&C and/or CR _Exclude Species and/or Habitat from RBO _Modify T&C and/or CR or Other (specify below) | Deleted: restored to dune habitat |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) | |
|------------------|---|--|--|--|
| Beach | 6. (T&C) The Corps, permittee, and/or local sponsor must be immediately notified by the project contractors upon locating an injured or dead beach mouse that had been harmed or destroyed. The Corps, permittee, and/or local sponsor must be responsible for notifying FWC Wildlife Alert at 1-888-404-FWCC (3922) and the U.S. Fish and Wildlife Service Office: for the Anastasia beach mouse and the Southeastern beach mouse (from Brevard County north) call (904) 232-2580; for the Southeastern beach mouse (south of Brevard County) call (772) 562-3909; and for the Choctawhatchee, St. Andrew, and Perdido Key beach mice call (850) 769-0552. Care should be taken in handling injured beach mice to ensure effective treatment or disposition and in handling dead specimens to preserve biological materials in the best possible state for later | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| Mice | analysis. 7. (T&C) The Corps, permittee, and/or local sponsor must ensure that the contractors conducting the work provide predator proof trash receptacles for the construction workers. The trash receptacles must be emptied daily. All contractors and their employees must be briefed on the importance of not littering and keeping the project area trash and debris free. | If trash receptacles are predator proof, why remove trash daily? If receptacles are of sturdy design and properly anchored to prevent loss or overturn; it would be impracticable to "remove" them daily. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: preditor Deleted: removed |
| Mice Beach Mice | 8. (T&C) The Corps, permittee, and/or local sponsor must contact the Service if feral cats are noticed within the work area. | "domestic or feral cat control as needed or appropriate on beachfront land within the project area." As with lighting issues the Corps has no jurisdiction to control beachfront lands. [Godsey] Control of free ranging feral or domestic cats is not within the authority and jurisdiction of the Corps. Anything beyond reporting such animals to the FWS is not appropriate or acceptable. [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | Deleted: The Service will meet with the contractor, Corps, permittee, and/or local sponsor to discuss the cause of the free ranging domestic or feral cats and a solution for free ranging domestic or feral cat control as needed or appropriate on beachfront lands within the project area. |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|---------------|---|--|--|
| Beach Mice | 9. (T&C) A report describing the projects that were conducted during the year and actions taken to implement the terms and conditions of this incidental take statement must be submitted to each of the U.S. Fish and Wildlife Service Field Offices in Florida (Jacksonville, South Florida, and Panama City, by March 1 of the following year. This report must also include the project location (include DEP R-Monuments), project description, dates of actual construction activities, acreage of new or widened access areas affected in beach mouse habitat, vegetation completed for new or widened access areas, success rate of vegetation. | It is unclear for this (and certain other) annual reporting requirements, who is responsible for gather information, preparing the report, and submitting it to FWS and/or other resource agencies. We may have to put someone in charge of this and other environmental reporting requirements. Since environmental staff are paid with project funds, the resources may not be available to provide a single consolidated annual report. Annual reporting for individual projects or permits may be more practicable. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Beach Mice | 1. (CR) All created dunes should be planted with at least three species of appropriate native salt-resistant dune vegetation. Examples along the east coast include: Panicum amarum (panic grass), Uniola paniculata (sea oats must be grown from local genetic stock), Ipomoea stolonifera (beach morning glory) or Ipomea pes-caprae (Railroad vine). Examples along the pan handle include: Panicum amarum (panic grass) or Schizachyrium scoparium (bluestem), Uniola paniculata (sea oats must be grown from local genetic stock), Ipomoea imperati (beach morning glory) or Ipomea pes-caprae (Railroad vine). | These measures increase funding pressures on strictly navigation projects, if required. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Beach Mice | 2. (CR) An educational sign should be placed where appropriate at beach access points explaining the importance of the area to coastal species including beach mice. An example of the information to be included in the sign is attached in Appendix ?. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Beach Mice | 3. (CR) Local sponsors and permittees should implement predator control programs that target free ranging domestic and feral cats. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] 4. (CR) Local sponsors and permittees should install dune walkovers at beach access points to protect the restored beach and dunes. | Comments (indicate source of comment) Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat Form RBO | |
|---------------|--|---|---|
| Beach | | Modify T&C and/or CR or Other (specify below) | |
| Mice | (CR) In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations. | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | - |
| Beach Mice | | | |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|----------|---|---|--|
| Dredging | | | |
| | The Service has reviewed the Programmatic Biological Assessment (PBA) and concurs that, for dredging activities offshore, if the Standard Manatee Construction Conditions are made a condition of the permit and implemented, then these activities "will not adversely affect" the Florida manatee. | Standard manatee protection measures are normally in the specifications for work involving vessels. [Dugger] <u>USACE master specs – 0157 Section 3.1.5.1 b-f</u> | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Manatees | Adjacent to the shore, inlet, and channels | | |
| | For dredging activities adjacent to the shore, inlets and/or inshore areas, if the following additional conditions are incorporated into the project and made a condition of the issued permit and implemented, the Service would concur that these activities "will not adversely affect" the Florida manatee: | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Manatees | a. Barges shall install fenders alongside that provide a minimum 4-foot standoff distance under maximum compression between other moored barges and large vessels, when in the vicinity of inlets, river mouths, and large estuaries where manatees are known to congregate. | USACE standard specs – 0157 Section 3.1.5.1 C – sentence starting with "Mooring bumpers" | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Manatees | b. Pipelines shall be positioned such that they do not restrict manatee movement to the maximum extent possible. | Possible conflict between this and SAV protection in some parts of the state | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Manatees | | | |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] c. Pipelines transporting dredged material shall be secured to the bottom substrate to the maximum extent possible, to prevent manatee entrapment or crushing within the vicinity of inlets, river mouths, and large estuaries where manatees are known to congregate. | Comments (indicate source of comment) | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
|------------|---|---------------------------------------|---|
| | NT MANATEE AREAS Recommend better delineate the bout Opinion. [Dugger] | | |
| IMA - Warı | n Water Aggregation Sites | | |
| | Upper St. Johns River Region (1) Blue Spring (Volusia County, FL) (2) Silver Glen Springs (Marion County, FL) (3) DeLeon Springs (Volusia County, FL) (4) Salt Springs (Marion County, FL) (5) The 20 Oklawaha River springs, including Silver Spring (Marion County, FL) | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Manatees | | | |

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| | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR | Comments (indicate source of comment) | |
|----------|--|---------------------------------------|--|
| Species | (recommended)] | | Proposed Solution(s) |
| | Atlantic Region | | Remove T&C and/or CR |
| | (6) Reliant Energy Power Plant (Brevard County, FL) (7) FPL Canaveral Power Plant (Brevard County, FL (8) FPL Riviera Beach Power Plant (Palm Beach County, FL) (9) FPL Port Everglades Power Plant (Broward County, FL) (10) FPL Fort Lauderdale Power Plant (Broward County, FL) (11) Coral Gables Waterway (Dade County, FL) (12) Sebastian River (C-54 canal) (Brevard County, FL) (13) Vero Beach Power Plant (Indian River County, FL) (14) Henry D. King Electric Station – Ft. Pierce Utilities (St. Lucie County, FL) (15) Big Mud Creek (St. Lucie County, FL) (16) Berkeley Canal (Brevard County, FL) (17) Black Point Park/Black Creek (Dade County, FL) (18) Palmer Lake (Dade County, FL) (19) Little River (Dade County, FL) (20) Turkey Point Canal (Dade County, FL) | | Exclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| | (21) C-111 canal and canal just west of Card Sound Bridge (Dade County, FL) | | |
| | (22) Biscayne Canal (Dade County, FL) (23) Banana River Marine Service Marina (Brevard | | |
| | County, FL) | | |
| | (24) Canals/Coves, Upper Keys (Bayside of Key Largo) (Monroe County, FL) | | |
| Manatees | (25) Harbor Branch canal (St. Lucie County, FL) | | |

| Species Manatees | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] Northwest Region (26) Crystal River Springs Complex (Citrus County, FL) (27) Homosassa River Springs Complex (Citrus County, FL) (28) Weeki Wachee/Mud/Jenkins Creek Springs (Hernando County, FL) (29) Progress Energy Crystal River Power Plant (Citrus County, FL) (30) Manatee/Fanning Springs (Dixie County, FL) (31) Wakulla/St. Mark's Complex (Wakulla County, FL) (32) The 5 Santa Fe River springs, including Ichetucknee Springs (Various counties – FL) | Comments (indicate source of comment) The project specific conditions are not identified for the Florida panhandle. Recommendation: Need to specify that since the panhandle areas do not contain warm water IMH sites, the standard manatee conservation measures will apply. [Godsey] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
|-------------------|--|---|---|
| Manatees | For dredging activities within warm water IMA sites, no dredging should take place during the winter season. In extraordinary circumstances, dredging activities may take place in these IMAs when the following additional conditions are included as conditions of the permit and implemented. The Service would concur that incorporation of these conditions in the issued permit and adherence to these conditions during project implementation would result in a determination that these activities would "not adversely affect" the Florida manatee: | Need to better define the boundaries of these IMAs in a GIS format. Depending on how expansive these boundaries are, the proposed requirements may not be acceptable. [Dugger] Already in place USACE master specs 0157 3.1.5.1 d&f | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Manatees | a. A Manatee Watch Program is in place. | | Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] b. No mechanical dredging or movement of barges shall occur from 1/2 hour before sunset to 1/2 hour after sunrise within the vicinity of inlets, river mouths, and large estuaries where manatees are known to congregate. | Comments (indicate source of comment) This is a limit on night time clamshell dredging and not acceptable. This could adversely effect IWW maintenance in Palm Beach and Broward counties (as examples). [Jordan] While there may be certain times at certain locations where there actually is a dense congregation of manatees and nighttime dredging would not be appropriate, a blanket prohibition against nighttime dredging could double the cost and/or duration of the dredging activity and be of little benefit to the | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
|--------------------|--|--|---|--|
| Manatees | c. Barges shall install fenders alongside that provide a minimum 4-foot standoff distance under maximum compression between other moored barges and large vessels, when in the vicinity of inlets, river mouths, and large estuaries where manatees are known to congregate. | species unless actually present at the time.[Dugger]. USACE standard specs – 0157 Section 3.1.5.1 C – sentence starting with "Mooring bumpers". | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | Deleted: |
| Manatees | d. Pipelines shall be positioned such that they do not restrict manatee movement to the maximum extent possible. | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| Manatees | e. Pipelines transporting dredged material shall be secured to the bottom substrate to the maximum extent possible, to prevent manatee entrapment or crushing within the vicinity of inlets, river mouths, and large estuaries where manatees are known to congregate. | Possible conflict between this and SAV protection in some parts of the state. | Remove T&C and/or CR _Exclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | Deleted: |
| Manatees Dredging | Projects within Important Manatee Areas that ar | re NOT a Warm Water Aggregation Site | | Deleted: \\Saj- fs1ncc\pd\\GROUP\PDE\DUGGER\R BA\TandCworkshop\CommentResolu tion.doc Deleted: L:\GROUP\PDE\DUGGER\ RBA\TandCworkshop\CommentResolu ution.doc |

| Species Manatees | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] For dredging projects within an IMA that is NOT a warm water aggregation site, the Corps must contact the Service's Field Office (Table #) for project specific conditions. | Comments (indicate source of comment) The Important Manatee Areas NOT in a warm-water aggregation area need to be listed and mapped (like that provided for the warm-water aggregation areas). Would these areas be excluded from the RBO requiring a separate Biological Opinion? [Dugger] [FWS will send updated maps when they become available.] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) [FWS will send updated maps when they become available.] |
|--------------------|--|--|--|
| | Table #. Service's Field Offices. Nassau, Duval, St. Johns, Flagler, Volusia, Brevard, Manatee, Pinellas and Hillsborough (North Florida Ecological Service Office 6620 Southpoint Dr. South # 310, Jacksonville, FL 32216 (904) 232-2580) Indian River, Broward, Charlotte, Collier, Lee, Martin, Miami-Dade, Monroe, Palm Beach, St. Lucie and Sarasota (South Florida Ecological Service Office 1339 20th Street Vero Beach, FL 32960 (772) 562-3909) Bay, Escambia, Franklin, Gulf, Okaloosa, Santa Rosa and Walton (Panama City Ecological Service Office 1601 Balboa Avenue Panama City, FL 32405 (850) 769-0552) | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Manatees Manatees | Although this does not represent a biological opinion for the manatee as described in section 7 of the Act, it does fulfill the requirements of the Act and no further action is required regarding manatees. It also fulfills the requirements of the Marine Mammal Protection Act. If modifications are made in the project or additional information becomes available on listed species, reinitiation of consultation may be required. | Note that no "take" is allowed under the Marine Mammal Protection Act. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| | Term and Condition or Conservation | Comments | |
|-------------|---|---|--|
| | Recommendation | (indicate source of comment) | |
| | [Indicate Whether T&C (required) or CR | | |
| Species | (recommended)] | | Proposed Solution(s) |
| | General | Throughout replace Corp with Corps and Corp's with | |
| Shore Birds | | Corps' | |
| | Lack of specificity in the project description (draft BA) | The shore bird requirements and recommendations | Remove T&C and/or CR |
| | makes the application of this programmatic with regard to shorebird conservation uncertain and therefore difficult to | would be particularly difficult to implement and maybe | √Exclude Species and/or Habitat from RBO |
| | apply an overall impact analysis. We have taken the | shore birds ought to be excluded from the RBA/RBO. Given the problems associated with shore bird impacts | Modify T&C and/or CR or |
| | Corps Conservation Measures [avoidance of primary | (as so aptly demonstrated by Casey Lott) and the limited | Other (specify below) |
| | constituent elements when practicable, pre-project | authority of the Corps to deal with them, it might be | [According to FWS, "The |
| | surveys, design alterations to minimize impacts as | better to exclude from the Regional Biological Opinion | Service is working on |
| | determined by working group] and added clarity. We | any activity impacting Federally listed threatened or | resolving these shore bird |
| | recommend that the Corp consider incorporating all or | endangered birds or their designated critical habitat. An | issues as well."] |
| | some into the final Biological Assessment. | individual ESA consultation would be required for any | |
| | | activity impacting such species or critical habitat | |
| | | [Dugger] | |
| | | The document is of a very general nature and not | |
| | | specific to any Mobile District project. However, | |
| | | numerous requirements of species monitoring and | |
| | | surveying, escarpment repair, and beach tilling all have | |
| | | potential conflicts with purely navigation maintenance | |
| | | projects' authorization and funding, leading to Anti- | |
| | | deficiency Act violations in non-funded years. [Godsey] | |
| | | | |
| | | [According to FWS, "The Service is working on resolving | |
| Shore Birds | | these shore bird issues as well."] | |
| TANDARE | D TERMS AND CONDITIONS FWS WILL APPLY TO BO | | |
| | RPM:1 The Corp and local sponsor/applicant shall | RPM:1 - Arranging such a meeting 30 days may not be | Remove T&C and/or CR |
| | arrange a meeting between representatives of the | doable. | Exclude Species and/or |
| | | | |
| | | doable. | Habitat from RBO |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida | Recommendation: Reword to state a meeting will be | |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the | | Habitat from RBO |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] | Habitat from RBO Modify T&C and/or CR or |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' | Habitat from RBO Modify T&C and/or CR or |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the commencement of work on this project. At least 10 days | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' specifications – the Preconstruction Conference | Habitat from RBO Modify T&C and/or CR or |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' specifications – the Preconstruction Conference (Section 0130 Section 1.5) and the Coordination | Habitat from RBO Modify T&C and/or CR or |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' specifications – the Preconstruction Conference (Section 0130 Section 1.5) and the Coordination meeting (Section 0145 Section 3.3). FWS, FWC, NMFS | Habitat from RBO Modify T&C and/or CR or |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' specifications – the Preconstruction Conference (Section 0130 Section 1.5) and the Coordination meeting (Section 0145 Section 3.3). FWS, FWC, NMFS and other interested parties have been (and will | Habitat from RBO Modify T&C and/or CR or |
| | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' specifications – the Preconstruction Conference (Section 0130 Section 1.5) and the Coordination meeting (Section 0145 Section 3.3). FWS, FWC, NMFS and other interested parties have been (and will continue to be) invited to these meetings. Contractor | Habitat from RBO Modify T&C and/or CR or |
| Shore Birds | contractor, the Fish and Wildlife Service, Panama City Florida Field Office, 850-769-0552; Vero Beach, Florida Field Office, #, Jacksonville, Florida, Field Office at #; the public land manager, the Florida Fish and Wildlife Conservation Commission at least 30 days prior to the commencement of work on this project. At least 10 days advance notice shall be provided prior to conducting this meeting. This will provide an opportunity for explanation | Recommendation: Reword to state a meeting will be held prior to construction. [Godsey] Two meetings are currently required by the Corps' specifications – the Preconstruction Conference (Section 0130 Section 1.5) and the Coordination meeting (Section 0145 Section 3.3). FWS, FWC, NMFS and other interested parties have been (and will | Habitat from RBO Modify T&C and/or CR or |

| Sp | ecies | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|----|-----------|--|---|--|
| | | | of the work beginning and the Coordination meeting is held about 7-10 days before work begins. | |
| Sh | ore Birds | RPM:2 The Corps permit shall include a special condition to ensure full implementation of the Project Conservation Measures and RPM's that address | This does not appear to be a complete thought. Why would there be a Term and Condition that requires "Conservation Measures"? If this is the intent, then make them Terms and Conditions so as not to confuse with Conservation Recommendations. [Dugger] RPM:2 "The Corps permit shall include a special condition to ensure full implementation of the project conservation measures and RPM's that address" Not clear as to who's conservation measures will become part of the permit. Recommended conservation measure suggested by the USFWS are implemented at the discretion of the Corps not by required permit conditions. Recommendation: This RPM needs to be removed. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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| | Species Shore Birds | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] RPM:3 Construction equipment and materials shall be staged and stored in a manner that will minimize impacts to shorebird foraging, roosting and nesting to the maximum extent practicable. T&C 1) All construction equipment, vehicles, pipe, and other project materials including temporary (less than one week) storage of pipe and staging areas for construction equipment shall be located off the beach to the maximum extent possible. No construction equipment, vehicles, pipe, and other project materials shall be located within optimal shorebird nesting, roosting or foraging habitat any time unless decided during pre-project meetings. Nighttime storage of construction equipment not in use shall be off the beach and dune habitats to minimize disturbance to shorebird nocturnal activities. | Comments (indicate source of comment) It might be easier to resolve this through the individual project/activity specific Biological Opinion instead of with the Regional Biological Opinion. [Dugger] | Proposed Solution(s) Remove T&C and/or CR _Exclude Species and/or Habitat from RBO _Modify T&C and/or CR or Other (specify below) | Deleted: The storage locations shall be approved by FWS and the public landowner prior to the project contract advertisement. |
|---|----------------------|---|---|--|--|
| | Shore Birds | RPM:4 Existing beach access points shall be used for vehicle and equipment beach access to the maximum extent practicable. The access points shall be delineated by fence or other suitable material to ensure vehicles and equipment transport stay within the access corridor. Access areas will be delineated by fence or other suitable material to ensure vehicles and equipment transport stay within the access corridor. RPM:5 Lighting associated with the project night work shall be minimized to reduce the possibility of disrupting shorebird nesting, roosting and foraging activities. [Sea turtle folks have detailed requirements that should appropriately cover this] | It might be easier to resolve this through the individual project/activity specific Biological Opinion instead of with the Regional Biological Opinion. [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: The final location of the beach access areas shall be approved by the Service and public landowner when applicable prior to the project contract advertisement. |
| | Shore Birds | | | | Deleted: \\Saj- / fs1ncc\pd\(GROUP\PDE\DUGGER\R\) BA\TandCworkshop\CommentResolu / tion.doc |
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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|-------------|---|---------------------------------------|---|
| | RPM:6 The Corp shall ensure that contractors conducting the project work fully understand the shorebird protection measures detailed in this incidental take statement. | | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |
| | RPM:7 The Corp shall ensure that the terms and conditions are accomplished and completed as detailed in this incidental take statement including completion of surveys and reporting requirements and the notification of any documented unauthorized take of shorebirds. | | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Shore Birds | RPM:8 The Corp shall ensure that the contractors | | Remove T&C and/or CR |
| | conducting the work provide predator proof trash receptacles for the construction workers. All contractors and their employees shall be briefed on the importance of not littering. | | Kerilove Tate and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |

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| | Term and Condition or Conservation Recommendation | Comments (indicate source of comment) | |
|-------------|---|---------------------------------------|--|
| Species | [Indicate Whether T&C (required) or CR (recommended)] | | Proposed Solution(s) |
| Эроспос | Reporting | | Remove T&C and/or CR Exclude Species and/or |
| | 1. A report describing the actions and the results of the actions taken to implement the terms and conditions of this incidental take statement shall be submitted to the Fish and Wildlife Service Panama City Florida Field Office. | | Habitat from RBOModify T&C and/or CR or Other (specify below) |
| | 850-769-0552, within 90 days of completion of the proposed work for each year when the activity has occurred. This report will include the dates of actual | | |
| | construction activities, names and qualifications of personnel involved in turtle nest and shorebird surveys, shorebird survey results, and any turtle nest relocation activities, descriptions and locations of self-release beach | | |
| | sites, and the required Florida Fish and Wildlife Conservation Commission beach restoration data (Appendix 2). | | |
| | 3. The Corp or their designee shall be immediately notified by the project contractors upon locating an injured or dead shorebird. The permittee or its designee shall be | | |
| | responsible for notifying FWC Wildlife Alert at 1-888-404-FWCC (3922) and the U.S. Fish and Wildlife Service Office (850) 769-0552 and GUIS (850) 934-2617. Care should be taken in handling injured animals to ensure | | |
| Shore Birds | effective treatment or disposition and in handling dead specimens to preserve biological materials in the best | | |
| | TION RECOMMENDATIONS | L | |
| | Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by | | Remove T&C and/or CR Exclude Species and/or |
| | carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to | | Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. | | , , , , , , , , , , , , , , , , , , , |
| Shore Birds | | | |

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| | Term and Condition or Conservation Recommendation | Comments (indicate source of comment) | |
|-------------|---|--|--|
| Species | [Indicate Whether T&C (required) or CR (recommended)] | | Proposed Solution(s) |
| | Many shorebirds not protected by the ESA rely on the swash zone along the beach front for foraging. The Corp should study the impacts of macro benthic invertebrate recovery rates and assemblages at minimum where the impacts are expected to reoccur on a regular basis. | Agree that this part of the shoreline is important to many birds, but what is the vehicle for the Corps to do this research? {Gasch} | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | Replacement of lost or smothered drift would provide | Where and what kind of tree material is needed? Is this | Remove T&C and/or CR |
| | possible nesting attractants and cover for roosting birds. Driftwood could be spread out between the primary dune and primary wrack line. IS THIS EVEN POSSIBLE, IS DRIFTWOOD OR SMAL TREE LIMBS? REMOVE PRIOR TO PROJECT STARTING. | doable? {Gasch} | Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |
| | Specific research that would be useful for future planning/minimizations? | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |
| Shore Birds | 4. Efforts to artificially create and maintain high quality plover habitats. However, consideration of such habitats to off-set perpetuation of habitat loss elsewhere must be contingent on empirical evidence that such habitats will support productive breeding (snowys) or roosting and foraging (snowy and piping, red knots?) and long-term commitments to maintain these habitats. (Loegering and Fraser 1995 suggest this and FWS 1996 task 1.24). | | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations. | Comments (indicate source of comment) | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
|-----------------------|---|--|---|--|
| Shore Birds Managemen | t Conservation Measures – The ESA does not have CON | SERVATION MEASURES. There are either terms and | | |
| conditions a | associated with specific RPMs or Conservation recomme cording to the act – not create a new type of condition no | ndations. These should be assigned to the proper | | |
| | CM:1 The Corp will support actions to this programmatic an adaptive living document to further minimize shorebird impacts. Task a. The Corp will establish a shorebird and engineers working group (Shorebird Advisory Committee) that will meet yearly. This group will at least include regional representatives FWS, FWC, DEP, Corp, and interested NGOs. This group will review completed projects, results of monitoring, etc to improve structure and applications of the programmatic conservation measure. [we need to make sure no violation of FACA] Task b. Sites can be added or removed from Tier I and Tier II as new data demonstrates their habitat qualities and potential bird use or lack of habitat and bird use. These will be determined at annual meeting as described in CM #1, task a (yearly shorebird advisory committee). | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). The Corps will participate in shorebird and migratory bird working groups to the extent funding allows and specific project responsibilities demand. However, it is doubtful that the Corps should be responsible for the "establishment" of any such working group or "advisory committee". Upon the advice of Council, we are reconsidering the Jacksonville District's existing "Migratory Bird Protection Policy" with respect to an "advisory committee" and the requirements of FACA.] [Dugger] Task a. Have concerns about who will actually establish the working groups, who will track the actions and recommendations, how will everyone be funded, etc[Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: \\Saj- |
| Shore Birds | | where the Tier I and Tier II areas are we are unable to make an adequate determination on impacts. [Godsey] | | fs1ncc\pd\GROUP\PDE\DUGGER\R BA\TandCworkshop\CommentResolu tion.doc |
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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Shore Birds | CM:2 The Corp shall track all projects implemented by their agency. Task a. The Corp shall maintain or contract out a database which includes DEP's project database that will assist the FWS in effectively evaluating direct, indirect, and additive impacts to shorebird habitat. This project spreadsheet shall have an associated GIS component and has been initiated by American Bird Conservancy personnel (Casey Lott, ABC in draft 2007). This database shall be updated no less than every 12 months. [Casey Lott to demo at meeting] | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | CM:3 The Corp shall adhere to high quality work standards. Task a. Qualified professionals with shorebird/habitat survey experience shall conduct required work per this programmatic. FWS and FWC reserve the right to reject the use of unqualified contractors hired to do this work. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] FWS and FWC should provide information regarding what they believe is "qualified" since this is the Corps contract and we can't fire a contractor after the fact because another agency didn't like them. FWC and FWS must provide specific scope of qualifications that they want in such a contractor. [Jordan] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Tier I Conse | rvation Measures | | |
| | Tier I Conservation Measures: sites that due to past habitat alterations and possibly recreational impacts are minimally important for shorebirds. These projects will have minimal conservation measures. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Shore Birds | CM:1 The Corp and the local sponsor shall minimize direct impacts to shorebirds and take provisions to enhance the shorebird habitat post project. Task a. MBTA protections require nesting shorebird surveys prior to and during project construction. FWC project guidelines must be followed to minimize direct impact to nesting shorebirds. See Conservation Recommendations for specific protections required under MBTA. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | Task b. To preserve shorebird feeding and roosting habitat, the mechanical removal of natural organic material (fresh and old wrack [wrack is defined as seaweed or ocean vegetation pushed ashore]) shall be prohibited year-round from the beach. Fresh wrack is moist and has living invertebrates that have been identified as important foraging and roosting habitat, whereas old wrack is important roosting habitat for snowy and piping plovers on the breeding, wintering and migration grounds as well as an abundance of other shorebirds. Trash and litter may be manually removed. Exceptions apply when health of humans may be affected such as with red tide events. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). This may conflict with long-standing beach grooming practices. Wrack may also mask intertwined glass, metal, marine organisms (poisonous, stinging, sharp, or spiny), or other items hazardous to beach goers. While the benefit of wrack to shore birds should be recognized, it is not certain that the management of wrack is the result of Corps action (the with verses without project condition). The long-standing conflict between human use and shorebirds is probably beyond the reach of Corps Regulatory or Civil Works authority. [Dugger] CM:1, Task b. As with the lighting the Corps has no way to enforce local practice on beach grooming. [Godsey] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Shore Birds | Task c. If tilling is needed under sea turtle requirements, it shall only occur above the primary wrack line and outside of the shorebird nesting season to avoid nesting disturbances and migrating shorebirds as the roost or forage (February 1-August 31 on Gulf Coast and April 1-August 31 on Atlantic Coast). If tilling occurs during shorebird nesting season, shorebird surveys prior to tilling will be required. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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| | Recommendation [Indicate Whether T&C (required) or CR | (indicate source of comment) | |
| Species | (recommended)] | | Proposed Solution(s) |
| | CM:2 The Corp and local sponsor shall minimize direct and indirect impacts to shorebirds and apply provisions to enhance the shorebird habitat pre- and post project. Task a. Through cost sharing with local sponsor, a percentage ?? of the Corp's monitoring budget or a minimum of \$??? per project shall be allocated to implement a statewide shorebird conservation/ management/ monitoring program This Shorebird Protection Program (SPP) can allow outside sources to contribute to the funding portion of this program. For example, other consultations taking place that do not fall under Corp jurisdiction may require provided funding as part of their "conservation measures" or "terms and conditions". The SPP must accomplish at minimum i-vi below. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). A statewide shorebird conservation/management/monitoring program would more appropriately be established by state and/or Federal agencies responsible for managing shorebird resources. Participation by the Corps would be limited to its Regulatory and Civil Works authorities. [Dugger] CM:2, Task a Is a SPP already established, if not, see comments above. Same for a Beach Management Plan. ii (2) - assuming that the roping and posting on refers to beaches in a project area. ii(4) – Very restrictive on public education. iv - purchasing land etc. would likely be cost prohibitive. CM:2, The Corps has no way to enforce. A local sponsor can not agree that an enforceable PMP can be | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| | | implemented. [Godsey] | |
| Shore Birds | | | |
| Shore Birds | -OR- The local sponsor (County/Municipality) or land manager must develop and implement a Beach Management Plan to incorporate adaptive management to evaluate activities on their beaches and minimization measures to incorporate species conservation on their beaches. The Plan must be enforceable by the County/Municipality and approved by the Corps, Service, and FWC. The Plan must include and implement at minimum the following: | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) | |
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| | i) Status surveys [need specifics- who often, where] | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| Shore Birds | | | | |
| Shore Birds | ii) Reduce project-inducted effects of increased recreational disturbance through intensive protection of plovers/red knots/shorebirds on all habitats (natural, artificially enhanced, and stabilized) in the project area from human disturbance and predation (cats, coyotes, raccoons,etc). (1) Adaptively, as used, shorebird nesting, foraging and concentrated roosting sites will be posted and roped for the life of the project (as long as a beach exists); FL FWC guidelines for roping off nesting areas shall be followed. (2) The local sponsor must post and rope sections of upper beach areas (out of common pedestrian use areas) prior to nesting season with the goal of enticing nesting shorebirds. These areas will be no larger than XXXX and will not occur in greater density than XX number within XX miles. FL FWC guidelines for roping off nesting areas shall be followed. (3) Local sponsor shall place educational signs where appropriate at beach access points explaining the importance of the imperiled species (e.g. sea turtles, beach mice, shorebirds) that are dependent on coastal habitats and ways to minimize human impacts. The Fish and Wildlife Service can provide sign examples. These should be approved by FWS and FWC and the local sponsor. (4) Public education (no feeding crows or seagulls, trash in receptacles, etc) must occur via TV announcements, kiosks, direct monitors on the beaches. (5) Enforcement of protection zone as needed, this is especially true for holiday weekends. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: \\Saj- fs1ncc\pd\GROUP\PDE\DUGGER\F BA\TandCworkshop\CommentReso tion.doc Deleted: L:\GROUP\PDE\DUGGEI |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) | |
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| | iii) Work with land managers/owners to improve habitat for nesting, roosting, feeding shorebirds. (1) The local sponsor shall install and maintain predator proof trash receptacles at all public beach accesses throughout the project area. (2) Vegetation plantings shall be minimized in designated shorebird use area (3) Pole placement/pier pilings in vicinity of shorebird use | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| Shore Birds | areas shall be made avian predator free (pointy tops). iv) Purchase land for shorebird conservation when reasonable which should include identifying areas where natural barrier beach processes can operate unimpeded. These might include not only undeveloped areas, but the potential "buy-out" of developments in areas that are sparsely developed and/or have high potential habitat value (e.g., proximity to feeding areas, prone to overwashes, etc.). (1) Creation or improvement of habitats, especially on baysides may be applicable as demonstrated by Snook Island Natural Restoration Areas project in Lake Worth, | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| | Palm Beach County, FL. The Corp was part of this. v) Notices of specific Animal Control Ordinance must be posted, where appropriate, at each beach access point, informing beach users about the County/Municipality's leash ordinance. Annually, a notice must be placed in the local paper informing beach users of the leash ordinance. Warnings and citations should be issued when appropriate to minimize harassment of sea turtles, beach mice, piping plovers and other shorebirds; (1) If no ordinance, County or local sponsor must initiate an ordinance that excludes pets on the beach (preferred) or requires pets on a leash while on the beach. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | Deleted: \\Saj- fs1ncc\pd\GROUP\PDE\DUGGER\R |
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| | Term and Condition or Conservation Recommendation | Comments | |
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| Species | [Indicate Whether T&C (required) or CR (recommended)] | (indicate source of comment) | Proposed Solution(s) |
| | Tier II Conservation Measures: very important areas for birds where we would prefer that projects not occur but, if necessary these specific areas considered high priority towards piping plover, snowy plover and red knot conservation will require very stringent conditions prior to project implementation. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | Impacts within the following areas will require a higher degree or coordination with the Service. Sites placed as Tier I or II are subject to change as determined by Shorebird Advisory Committee: NW Panhandle (List Counties): List specific locations with attached maps NE Florida (List Counties): List specific locations with attached maps SW Florida (List Counties): List specific locations with attached maps E Florida (List Counties): List specific locations with attached maps | | |
| | CM:1 The Corp and the local sponsor or land manager should implement increased levels of protection for breeding and non-breeding shorebirds that contribute to their conservation post project into perpetuity. Task a. Apply all Tier I Conservation Measures to projects that impact Tier II areas. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |
| | CM:2 Spatially explicit maps will be used for project planning that will provide estimates of habitat amount and bird densities. Negative survey data and the amount of recreational pressures (i.e. number of people and dogs seen while surveying) shall also be counted. [Methods will be provided – Casey Lott roped into writing monitoring program] | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |
| Shore Birds | Task a. The Corp or local sponsor shall fund surveys during an entire 12-month period (covering the non-breeding season for plovers and knots and the breeding season for SNPL) to document the spatial extent of site use, delineate the major forage and roost areas by | | |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| ореспез | season, and document all nesting areas. | | Toposca contaion(s) |
| Shore Birds | Task b. Prior to placement of dredged material a qualified biologist using results of above required surveys, will mark avoidance areas (such as washovers and access points) using obvious identifiers (for example, pink flagging on poles) to clearly mark the beginning and end marks to prevent accidental impacts to protected areas. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| STICLE BILOS | Task c. At least one of the bi-monthly shorebird surveys in April, May, September and October will occur on a weekend to document the amount of recreational pressure potentially occurring during migration months. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |

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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] Task d. Post Project surveys will occur for a full 12-month period (as above) starting 2 years after sand placement and 4 years after sand placement. Comparisons of these surveys with initial surveys will be used to determine if there have been long-term impacts to habitat amounts or bird use due to sand placement. These surveys will follow the same protocol as in the step above. | Comments (indicate source of comment) Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
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| Shore Birds | the same protection as in the step above. | CM:2 Task d. Before agreements are made as to who will fund these surveys, especially a program of multiple surveys that would extend beyond the time frame of the contract, the Corps should have a better understanding of the scientific basis for such studies and also consider whether it can absorb that cost. [Godsey] | | |
| | CM:3 Existing optimal shorebird foraging, nesting and roosting habitat shall be protected through preservation of optimal habitat and by allowing geomorphologic processes necessary to maintain these optimal habitats. Projects with permanent impacts to shorebird habitat shall not be allowed. Task a. Repair or replacement of jetties outside of original | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| Shore Birds | footprint will require separate consultations. Task b. The Corp shall coordinate and host a pre-contract meeting at least 3 months prior to letting the construction contract. Meeting participants shall include the FWS, primary land manager, FWC, DEP?, and local sponsor to discuss avoidance areas and placement specifications. All required data as explained in CM 2 (Tier II section) above shall be collected prior to this meeting. The final project designs and avoidance areas must be approved by the FWS. The following exceptions to optimal shorebird habitat protection apply: a. When protected beach mice habitat protection shall take precedence. No shorebird habitat is to be protected | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] CM:3 Task b. Meetings with all the support agencies 3 months in advance may be too far out. Recommend shortening, perhaps one month. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: \\Saj- |
| Shore Birds | <u> </u> | \Branches\Environmental\DOCS\BchPIProtect RegBiolAssess\Comment6 | Possilution dos PAGE 53 of 62 | fs1ncc\pd\GRÓUP\PDE\DUGGER\R BA\TandCworkshop\CommentResolu tion.doc Deleted: L:\GROUP\PDE\DUGGER\ RBA\TandCworkshop\CommentResol ution.doc |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
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| Species | land manager agree that loss of optimal shorebird habitat is in the best interest of overall island dynamics. | | Proposed Solution(s) |
| Shore Birds | Task c. The Corp must demonstrate that the project is designed so that sand placed in foraging areas will not preclude long term use of the area. i) Sand placed in or near foraging areas will not interrupt geomorphologic processes that lead to habitat renewal (e.g., if birds are using an overwash area, sand placement will not occur as a berm in front of this area; if birds are using mudflats that receive sediment from a littoral drift cell, sand placement should not change circulation patterns so as to starve these areas of sediments). This may require independent technical review of project design proposals by coastal geomorphologists. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] Task c. Preserving all overwash areas may be defeating some protection measures. In some cases the intention is to increase lost elevation to prevent overwash. Task c i) - Not sure how this can be adequately determined without modeling efforts so consideration of costs needs to occur. Furthermore, this condition is not clear for existing authorized and constructed projects. [Godsey] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) |

| Species Shore Birds | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] ii) Consideration may be given to placing a portion of dredged material at mid-island locations on optimal shorebird lands but not in optimal foraging areas, in coordination with and approved by the primary land managers, FWS, and coastal geologists. Mid-beach placement could reduce impacts to the Gulf beaches and baysides as well as provide additional protection for other rare species. | Comments (indicate source of comment) Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Proposed Solution(s) Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
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| Shore Birds | Task d. Two years post-specific projects completion, the Corp shall be required to rectify any unforeseen circumstances that dredge placement may have on the project area, for example, remove or lower fill material should it prove sufficiently impenetrable to restrict sufficient overwash for the island or peninsula to function as determined in Conservation Measures #. ?? | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
| Shore Birds | Task e. If permanent negative effects to habitat or birds are demonstrated from required monitoring pre and post project, similar sand placement projects will not be allowed without major modification to designs. Review and discussion of reports that compare initial bird/habitat surveys with 2-year and 4-year follow-up bird/habitat surveys will be the primary means for adaptive management (e.g., improving sand placement design templates so that they will not have negative impacts to birds). Areas that have importance to birds, negative project performance (in terms of bird habitat or bird use) will argue strongly against sand placement in important bird areas in the future, without major design modifications. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or Other (specify below) | |
| Shore Birds | On rare occasions, at the discretion of the FWS and DEP, and depending on severity of the project, sediment dynamics and island morphology monitoring may be required and if so, shall be funded by the Corp or local sponsor. A research project should improve our knowledge of the success of dredged material placement and how it may affect the long term management of sediment removal and/or placement on selected barrier island or peninsula area. This may be more applicable to | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | Deleted: \\Saj- fs1ncc\pd\\GROUP\PDE\\DUGG BA\\TandCworkshop\Comment tion.doc Deleted: L:\GROUP\PDE\DU RBA\TandCworkshop\Commen |

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| Species | [Indicate Whether T&C (required) or CR (recommended)] | | Proposed Solution(s) |
| орошос | re-occurring actions in Tier II areas. | | |
| Shore Birds | i) The Corp, with approval by and in coordination with FWS, FWC, primary land managers and coastal geomorphologists (either used from agency or contracted by the Corp) shall initiate a study to evaluate if the project is successfully being integrated into the coastal system as intended. The Corp should initiate a pre-nourishment survey/sampling for baseline purposes and be prepared to monitor quarterly for up to two years post any sediment placement. The possible goals of the evaluation are to identify current patterns and trends in morphological changes to the island such as 1) is the island widening and moving landward as it should; 2) is the island narrowing from a continued unnatural rate of erosion affected by Pass maintenance; and 3) is any additional information or actions needed to offset island morphological changes that may affect the piping plover, beach mice and sea turtle habitat as a result of the long term erosional influence of the dredged navigational entrance; 4) site specific goals per project will be discussed at the required pre-project meeting. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] Task f. i) - For any type of monitoring there could be funding issues for the out years. [Godsey] | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |

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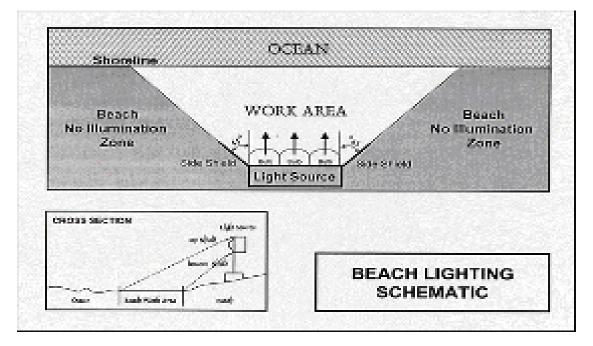
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| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] CM:4 The Corp and the local sponsor or land manager | Comments (indicate source of comment) Are these conservation recommendations? For the | Proposed Solution(s) Remove T&C and/or CR | |
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| | should implement increased levels of protection for breeding and non-breeding shorebirds that contribute to their conservation post project into perpetuity. | purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA ("Terms and Conditions" and "Conservation") | Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| | Task a. If surveys determine there is human disturbance to the primary or optimal foraging, nesting and roosting areas used by shorebirds in these areas should be posted | Recommendations"). [Dugger] CM:4 - Is it really feasible to rope off areas to prevent | Other (specify below) | |
| | and protected by symbolic roping at a distance sufficient to avoid disturbance to the birds, especially when migration overlaps with boating season as boaters are | any recreational use? [Godsey] | | |
| Shore Birds | more apt to anchor at primary areas such as washover flats for recreation and to access the beaches from the baysides. | | | |
| | CM:5 The Corp and their contractors shall minimize impacts to shorebirds and their habitat during project construction. | Are these conservation recommendations? For the purposes of the Regional Biological Opinion, discussion should focus on threatened and endangered species (or other ESA status species) and the requirements of ESA | Remove T&C and/or CRExclude Species and/or Habitat from RBOModify T&C and/or CR or | |
| | Task a. Only dredged material suitable for sea turtle nesting, successful incubation, and hatchling emergence, beach mouse burrow construction and food plant sources, | ("Terms and Conditions" and "Conservation Recommendations"). [Dugger] | Other (specify below) | |
| | and piping plover food prey species substrate shall be placed within the project area. [The specifics of dredged material quality is handled specifically by DEP and under sea turtles terms and conditions. If other data comes to | | | |
| Shore Birds | light relative to shorebird impacts, this may be altered]. ry Bird Treaty Act (MBTA) | | | |
| The Wigrato | TY BITCH TREATY ACT (MIDTA) | | | |
| | The Migratory Bird Treaty Act (MBTA) implements various treaties and conventions between the U.S., Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory bird. Under the provisions of the MBTA it is unlawful "by any means or manner to pursue, | Suggest that Migratory Bird Treaty Act requirements be deleted since for threatened and endangered birds and the Endangered Species Act are the subject of any Regional Biological Opinion. {Dugger} | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) | |
| | hunt, take, capture or kill any migratory bird except as permitted by regulations issued by the Fish and Wildlife Service. The term "take" is not defined in the MBTA, but the Service has defined it by regulation to mean to pursue, | Migratory Bird Treaty Act (MBTA): We should not agree to follow guidelines that have not been developed. [Godsey] | | Deleted: \\Saj- fs1ncc\pd\GROUP\PDE\DUGGER' BA\TandCworkshop\CommentRes |
| Shore Birds | hunt, shoot, wound, kill, trap, capture or collect any migratory bird, or any part, nest or egg of any migratory bird covered by the conventions or to attempt those | | DACE 57 of 62 | tion.doc Deleted: L:\GROUP\PDE\DUGGE RBA\TandCworkshop\CommentRe ution.doc |

| Species | Term and Condition or Conservation Recommendation [Indicate Whether T&C (required) or CR (recommended)] | Comments (indicate source of comment) | Proposed Solution(s) |
|-------------|--|--|--|
| • | activities. | | |
| | | | |
| | | | |
| | | | |
| | The permittee must follow FWC's standard guidelines[FWC to provide current guidelines?] to protect against impacts to all nesting shorebirds during implementation of projects under Tier I and Tier II during the periods from February 15-August 31. | Suggest that Migratory Bird Treaty Act requirements be deleted since for threatened and endangered birds and the Endangered Species Act are the subject of any Regional Biological Opinion. {Dugger} | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |
| | The Fish and Wildlife Service will not refer the incidental take of any migratory bird or bald eagle for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703-712) or the Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. 668-668d), if such take is in compliance with the terms and conditions specified here. | Suggest that Migratory Bird Treaty Act requirements be deleted since for threatened and endangered birds and the Endangered Species Act are the subject of any Regional Biological Opinion. {Dugger} | Remove T&C and/or CR Exclude Species and/or Habitat from RBO Modify T&C and/or CR or Other (specify below) |
| Shore Birds | | | |

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Figure #. Beach lighting schematic.



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Table #: Service's Field

Offices

| County project occurs | Service Field Office | Address |
|---|---|----------------|
| Nassau, Duval, St. Johns, Flagler, Volusia, Brevard, Manatee, Pinellas and Hillsborough | North Florida Ecological Service Office | (904) 232-2580 |
| Indian River, Broward, Charlotte, Collier, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Lucie | South Florida Ecological Service Office | (772) 562-3909 |
| Bay, Escambia, Franklin, Gulf, Okaloosa, Santa Rosa and Walton | Panama City Ecological Service Office | (850) 769-0552 |

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Figure 1. Dune restoration fence alignment.

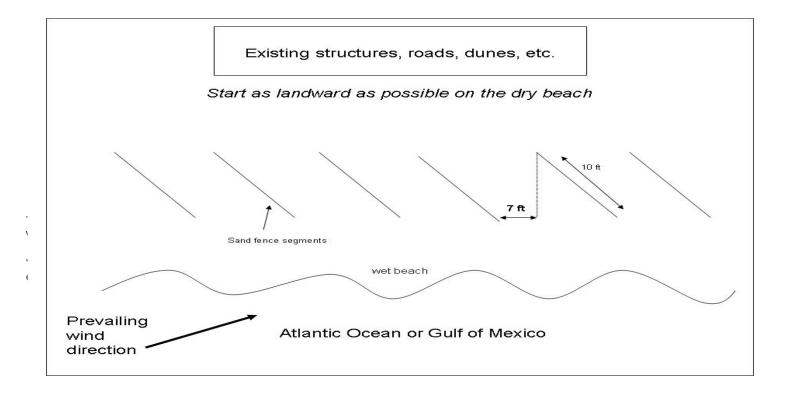


Table #: Sea Turtle Monitoring for Beach Nourishment or Dredged Material Placement

| Characteristic | Parameter | Measurement | Variable |
|----------------------|------------------------------|--|--|
| Nesting Success | False crawls - number | Visual assessment of all false crawls | Number and location of false crawls in nourished areas and non nourished areas: any interaction of the turtle with obstructions, such as groins, seawalls, or scarps, should be noted. |
| | False crawl - type | Categorization of the stage at which nesting was abandoned | Number in each of the following categories: emergence-no digging, preliminary body pit, abandoned egg chamber. |
| | Nests | Number | The number of sea turtle nests in nourished and non nourished areas should be noted. If possible, the location of all sea turtle nests must be marked on map of project, and approximate distance to sea walls or scarps measured using a meter tape. Any abnormal cavity morphologies should be reported as well as whether turtle touched groins, seawalls, or scarps during nest excavation |
| | | Lost Nests | The number of nests lost to inundation, erosion or the number with lost markers that could not be found. |
| | Lighting Impacts | Disoriented sea turtles | The number of disoriented hatchlings and adults must be documented and reported in accordance with existing FWC protocol for disorientation events. |
| Reproductive Success | Emergence & hatching success | Standard survey protocol | Numbers of the following: unhatched eggs, depredated nests and eggs, live pipped eggs, dead pipped eggs, live hatchlings in nest, dead hatchlings in nest, hatchlings emerged, disoriented hatchlings, depredated hatchlings |

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